APPENDIX J
NOISE STUDY

Blackhall Studios-Santa Clarita Project

Noise and Vibration Study

prepared for

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1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise and vibration impacts of the proposed Blackhall Studios-Santa Clarita Project (project) in the City of Santa Clarita (City). The purpose of this study is to analyze the project's noise and vibration impacts related to both temporary construction activity and long-term operation of the project. Table 1 provides a summary of project impacts.

Table 1 Summary of Impacts

Impact Statement	Proposed Project's Level of Significance	Applicable Recommendations
Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than significant impact	None
Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant impact	None
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No impact	None

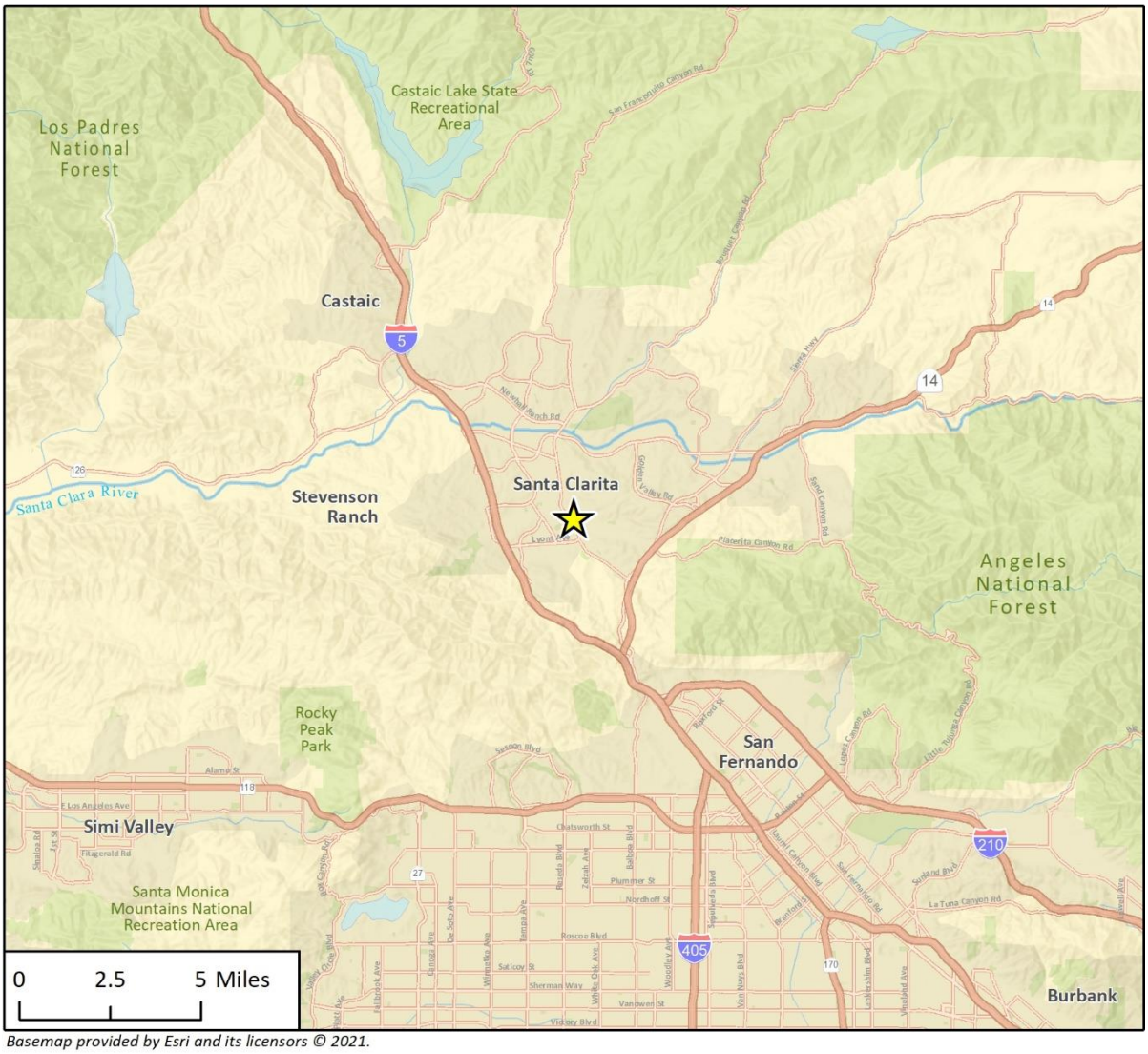
1.2 Project Summary

Project Location

The project site is in the City of Santa Clarita in Los Angeles County, California. The regional location of the project site is shown in Figure 1. The 93.5-acre project site is located east of Railroad Avenue and north of 13th Street. The project location is depicted in Figure 2. Adjacent land uses include residential developments to the north and east, and commercial and light industrial uses to the south and west. Undeveloped land is also adjacent to the northeast of the parcel. Land uses in the greater vicinity include residential, commercial, and light industrial, as well as oilfields located approximately one mile to the east. The Newhall Metrolink right-of-way is located along the property's western boundary, parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east.

Surrounding land uses include residential uses to the north, east, a mobile home park at 24833 Railroad Avenue to the west, and commercial and light industrial uses to the south. The Newhall Metrolink right-of-way (ROW) is located along the site's western boundary parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east and 13th and 12th Streets borders the project site to the south.

Figure 1 Regional Location



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Project Location

N

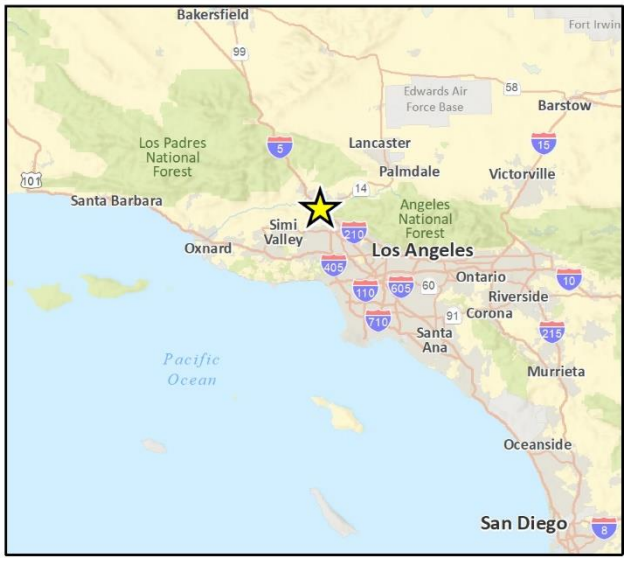

Figure 2 Project Site Location and Site Plan

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Fig 2 Project Location_Proj Design_20220222a

Project Description

The project involves the construction of a full-service film and television studio campus that is planned for the currently-vacant 93.5-acre parcel of land situated at the northeast corner of Railroad Avenue and 13th Street. A five-level (four elevated) parking structure is also included in the proposed project. The overall site includes approximately 476,000 square feet of sound stages; approximately 571,000 square feet of workshops, warehouses and support uses; approximately 210,000 square feet of production and administrative offices; and approximately 37,500 square feet of catering and other specialty services. The project proposes a bridge across Placerita Creek to access a graded employee parking area on the north side of Placerita Creek. This report also evaluates the adjacent 11.4 acre Metropolitan Water District (MWD) right of way parcel, which may potentially be utilized for excess parking, subject to agreement with MWD. See Figure 2 for the project site design features.

2 Background

2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013a).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dBA; reducing the energy in half would result in a 3 dBA decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (eight times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud ([10.5x the sound energy] Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner in which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013a). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013a). Noise levels may also be reduced by intervening structures. The amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can substantially alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5 dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2006). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. Community Noise Equivalent Level (CNEL) is the average sound level over a 24-hour period, with a +5 dBA penalty for evening (7:00 p.m. to 10:00 p.m.) hours and a +10 penalty for nighttime (10:00 p.m. to 7:00 a.m.) hours.

2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is affected by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in

monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

2.3 Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Sensitive land uses are those in which persons occupying the use are particularly sensitive to the effects of noise. The City of Santa Clarita General Plan Noise Element list of noise sensitive uses includes housing, schools, medical facilities, libraries, social care facilities, and similar facilities (City of Santa Clarita 2011). Surrounding land uses that would be considered sensitive receivers include single family residences of residential development along Alderbrook Drive and Circle J Ranch Road to the east, south of Via Princessa to the north, along Placeritos Boulevard to the southeast, and the mobile home park at 24833 Railroad Avenue to the west. There are two churches in the general vicinity of the project site, Newhall Christian Church approximately 300 feet to the east and Village Church approximately 525 feet to the west, however, these uses would not have direct line of site to the project site due to intervening structures consisting of residential or commercial uses. School uses in the vicinity of the project, Placerita Junior High School, Hart High School, Newhall Elementary School, and The Master's University, are also shielded by intervening commercial and residential uses and are located more than 900 feet from the nearest project site boundary lne.

Vibration sensitive receivers are similar to noise sensitive receivers, such as residences and institutional uses (e.g., schools, libraries, and religious facilities). However, vibration sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance (FTA 2018; Caltrans 2020).

2.4 Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic from Railroad Avenue, 12th Street, and railroad activity. To characterize ambient noise levels at and near the project site, six 15-minute noise level measurements were conducted on November 18, 2021, using an Extech (Model 407780A) ANSI Type 2 integrating sound level meter. The noise meter was calibrated before and after each measurement. Noise Measurement (NM) 1, NM2, and NM3 were conducted to the north of the project site to capture ambient noise levels at residential uses. NM4 and NM6 were conducted at residential use to the east of the project site to capture ambient noise levels at these residential uses. NM5 was conducted to the west of the project site to capture ambient noise levels at the mobile home park residential uses. Measurements were taken in the afternoon with light winds (five miles per hour or lower), light cloud cover, and temperatures between 75 and 80 degrees Fahrenheit. Primary noise sources occurred from vehicular traffic for each measurement, with some measurements picking up noise from intermittent sources such as airplanes and dogs barking.Table 2 summarizes the results of the noise measurements, and noise measurement locations are shown in Figure 3.

Figure 3 Noise Measurement Locations

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Table 2 Project Vicinity Sound Level Monitoring Results

Measurement	Location	Sample Times	Primary Noise Sources	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)
NM1	Residential area north of project site	12:51 p.m. – 1:06 p.m.	Railroad Avenue (approximately 450 feet from roadway centerline)	43	36	55
NM2	Residential area north of project site	1:11 p.m. – 1:26 p.m.	Wind, airplanes, birds	41	34	54
NM3	Residential area northeast of project site	1:31 p.m. – 1:46 p.m.	Circle J Ranch Road (275 feet from roadway centerline)	58	56	87
NM4	Residential backyard area east of project site	1:58 p.m. – 2:13 p.m.	12th Street (475 feet from roadway centerline)	49	41	64
NM5	Mixed uses west of project site	2:22 p.m. – 2:57 p.m.	Railroad Avenue (45 feet from roadway centerline)	70	49	87
NM6	Residential backyard area east of project site	2:58 p.m. – 3:13 p.m.	Railroad Avenue (1,240 feet from roadway centerline), dogs barking, wind	47	39	66

Detailed sound level measurement data are included in Appendix A.

2.5 Regulatory Framework

City of Santa Clarita General Plan Noise Element

The City of Santa Clarita Noise Element contains goals and policies that are designed to include noise control in the planning process in order to maintain compatible land uses with acceptable environmental noise levels and protect Santa Clarita residents from excessive noise. The Noise Element provides Noise and Land Use Compatibility Guidelines as shown in Figure 4 (City of Santa Clarita 2011).

The Noise Element also establishes the following goals and policies that would apply to the proposed project:

Goal N 1: A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors.

Objective N 1.1: Protect the health and safety of the residents of the Santa Clarita Valley by the elimination, mitigation, and prevention of significant existing and future noise levels.

Policy N 1.1.1: Use the Noise and Land Use Compatibility Guidelines contained on Exhibit N-8 (reproduced herein as Figure 4), which are consistent with State guidelines, as a policy basis for decisions on land use and development proposals related to noise.

Policy N 1.1.2: Continue to implement the adopted Noise Ordinance and other applicable code provisions, consistent with state and federal standards, which establish noise impact thresholds for noise abatement and attenuation, in order to reduce potential health hazards associated with high noise levels.

Policy N 1.1.3: Include consideration of potential noise impacts in land use planning and development review decisions.

Policy N 1.1.4: Control noise sources adjacent to residential, recreational, and community facilities, and those land uses classified as noise sensitive.

Goal N 2: Protect residents and sensitive receptors from traffic-generated noise.

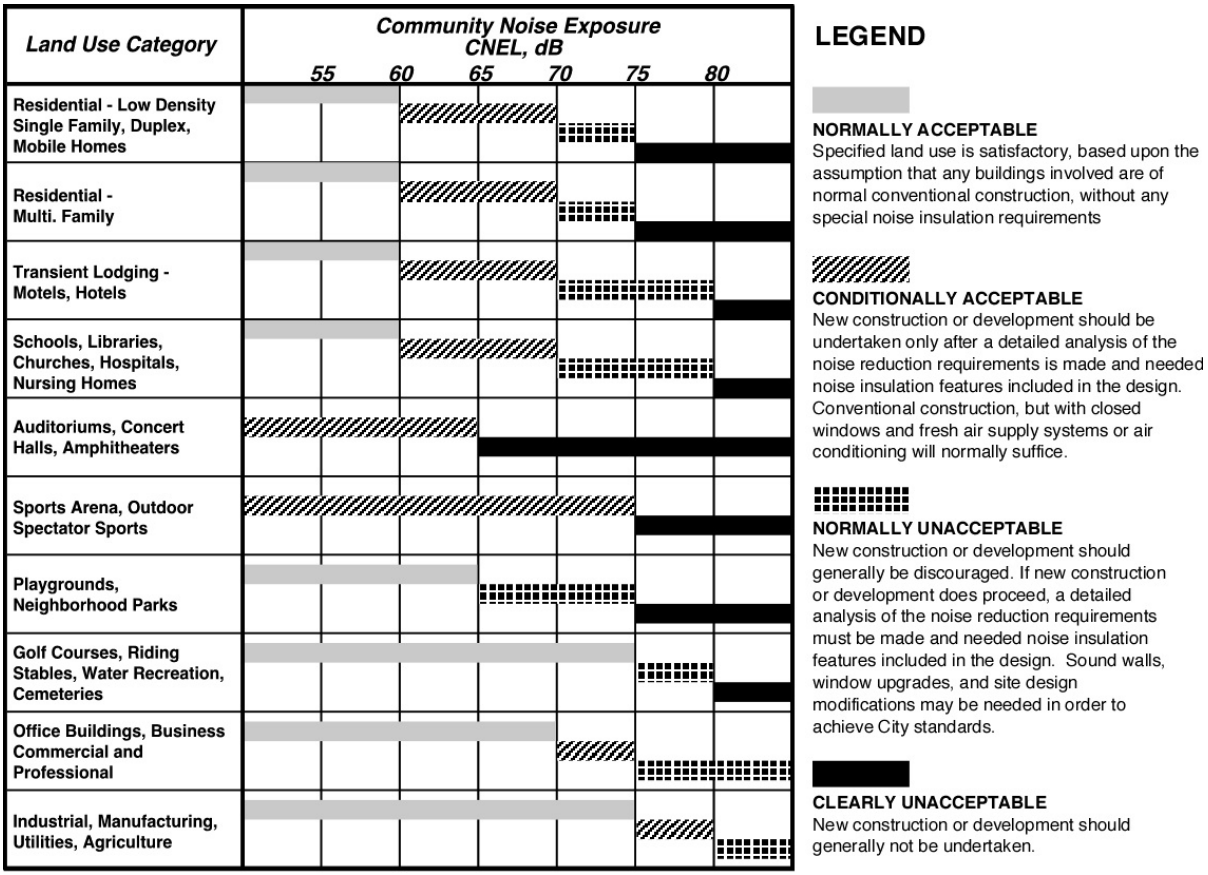
Objective N 2.1: Prevent and mitigate adverse effects of noise generated from traffic on arterial streets and highways through implementing noise reduction standards and programs.

Policy N 2.1.2: Encourage the use of noise absorbing barriers, where appropriate.

Policy N 2.1.4: Reduce significant noise levels related to through-traffic in residential areas by promoting subdivision circulation designs to contain a hierarchy of streets, which efficiently direct traffic to highways.

Policy N 2.1.7: Require vehicle owners to properly maintain their equipment to avoid generating excessive noise levels.

Figure 4 City of Santa Clarita Noise and Land Use Compatibility Guidelines



Goal N 3: Protect residential neighborhoods from excessive noise.

Objective N 3.1: Prevent and mitigate significant noise levels in residential neighborhoods.

Policy N 3.1.1: Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.

Policy N 3.1.2: Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site design) for new residences to reduce outdoor noise levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.

Policy N 3.1.3: Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.

Policy N 3.1.4: Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.

Policy N 3.1.7: Ensure that design of parks, recreational facilities, and schools minimize noise impacts to residential neighborhoods.

Santa Clarita Municipal Code

SCMC Section 11.44.040(A-B). Santa Clarita Municipal Code (SCMC) Section 11.44.040(A) sets exterior noise level limits for residential, commercial, and manufacturing land uses, which are summarized in Table 3. SCMC Section 11.44.040(B) provides corrections to the noise level limits for certain noise conditions, which are summarized in Table 4. These corrections may be applied to the increase or decrease the numerical noise level limits shown in Table 3 where applicable noise conditions exist.

Table 3 Noise Level Limits

Region	Time	L_{eq} (dBA)
Residential	Day[1]	65
	Night[2]	55
Commercial/Manufacturing	Day[1]	80
	Night[2]	70

[1] SCMC Section 11.44.020 defines "Day" as 7:00 a.m. to 9:00 p.m.

[2] SCMC Section 11.44.020 defines "Night" as 9:00 p.m. to 7:00 a.m.

Source: SCMC Section 11.44.040(A)

Table 4 Corrections to Noise Limits

Noise Condition	Correction (in dB)
Repetitive Impulsive Noise	-5
Steady Whine, Screech or Hum	-5
Noise Occurring More Than 5 But Less Than 15 Minutes Per Hour[1]	+5
Noise Occurring More Than 1 But Less Than 5 Minutes Per Hour [1]	+10
Noise Occurring Less Than 1 Minute Per Hour [1]	+20

[1] These corrections apply to daytime noise level limits only.
Source: SCMC Section 11.44.040(B)

SCMC Section 11.44.060(A). It shall be unlawful for any person within the City to use or operate any radio receiving set, musical instrument, phonograph, television set, or other machine or device for the producing or reproducing of sound at any time in such a manner as to produce noise levels on residential land which would disturb the peace, quiet and comfort of neighboring residents or any reasonable person of normal sensitivity residing in the area.

SCMC Section 11.44.070. Any noise level from the use or operation of any machinery, equipment, pump, fan, air conditioning apparatus, refrigerating equipment, motor vehicle, or other mechanical or electrical device, or in repairing or rebuilding any motor vehicle, which exceeds the noise limits as set forth in Section 11.44.040 at any property line, or, if a condominium or rental units, within any condominium or rental unit within the complex, shall be a violation of this chapter.

SCMC Section 11.44.080. No person shall engage in any construction work which requires a building permit from the City on sites within 300 feet of a residentially zoned property except between the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. Further, no work shall be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day, and Labor Day. Emergency work as defined in SCMC Section 11.44.020(D) is permitted at all times. The Department of Community Development may issue a permit for work to be done "after hours"; provided, that containment of construction noises is provided.

SCMC Section 11.44.090. The noise limits as described in SCMC Section 11.44.040(A) shall apply to any use of sound-amplifying equipment.

SCMC Section 17.57.020(E). For residential properties and structures, all air conditioners, antennas, heating, cool and ventilating equipment, and all other mechanical, lighting, or electrical devices shall be screening, shielded and/or sound buffered from surrounding properties and streets.

3 Methodology

3.1 Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). Typical heavy construction equipment during project grading could include dozers, loaders, graders, excavators, lifts, water trucks and dump trucks. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Over the course of a typical construction day, construction equipment would be located as close as 105 feet to adjacent noise sensitive properties to the east but would typically be located at an average distance farther away due to the nature of construction and the lot size of the project. For example, during a typical construction day, the equipment may operate across the horizontal distance of the site (105 to 1,050 feet) from single-family residents to the east. Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 200 feet from adjacent noise sensitive properties. This is also a conservative estimate for off-site construction for roadway improvements that would occur on 13th Street, 12th Street, Arch Street, and Railroad Avenue, which would occur approximately 200 feet from the nearest residences at the closest point, but would average a further distance over a typical construction day.

Construction noise is typically loudest during activities that involve excavation and moving soil, such as site preparation and grading. A potential construction scenario includes a grader, front-end loader, and a dump truck working during grading to excavate and move soil. At a distance of 200 feet, a grader, front-end loader and a dump truck would generate a noise level of 70 dBA L_{eq} (RCNM calculations are included in Appendix B).

3.2 Groundborne Vibration

The proposed project would not include any substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate groundborne vibration affecting nearby receivers, especially during grading and excavation of the project site. The greatest vibratory source during construction within the project vicinity would be an excavator. A large bulldozer was used as a proxy for an excavator for the purpose of this analysis as they create similar vibration levels during construction activities. Neither blasting nor pile driving would be required for construction of the project. Construction vibration estimates are based on vibration levels reported by Caltrans and FTA (Caltrans 2020, FTA 2018). Table 5 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 5 Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 ft. (in/sec)
Vibratory Roller	0.0210
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: FTA 2018

Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors; therefore, the vibration level threshold is assessed at occupied structures (FTA 2018). Therefore, all vibration impacts are assessed at the structure of an affected property.

3.3 Operational Noise Sources

On-site noise sources would include general conversations, landscape maintenance, waste hauling, parking lot activities, and rooftop heating, ventilation, and air conditioning (HVAC) units and exhaust fans. Landscape maintenance and waste hauling are regulated by the noise ordinance as discussed in Chapter 7.04 of the City's Municipal Code. The project would not have outdoor production activities; therefore, production activities would be contained with the interior environment and would not generate audible noise at nearby sensitive receivers. Thus, the primary noise sources of concern would be associated with HVAC units, exhaust fans, and parking lot activities as there are no specific regulations beyond the limitation of noise levels. These on site-noise sources were modeled with SoundPLAN. Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes that all receivers would be downwind of stationary sources. This is a worst-case assumption for total noise impacts since only some receivers would be downwind at any one time.

Mechanical Equipment

The project would include rooftop HVAC units and exhaust fans. Mechanical equipment would be associated with the studios (Buildings 1 through 19), production support, office, gym, and catering buildings. Based on project plan specifications, representative sound power levels for the proposed Daiken HVAC and Greencheck exhaust fan equipment were applied for analysis. The manufacturer's

noise data is provided below in Table 6 (see Appendix C for specification sheets). For a conservative scenario, the units were assumed conservatively to operate at 100 percent of an hour for 24 hours. All HVAC units were modeled as being three feet above roof top elevation. Noise propagation was estimated in SoundPLAN using algorithms from ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation."

Table 6 HVAC Noise Levels

	Noise Levels in dB[1] Measured at Octave Frequencies								
Representative Unit	63 Hz	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz	Overall Noise Level (dBA)
RDT101D	88	85	81	79	78	73	65	58	85
RDT071D	85	82	78	76	75	70	62	55	79
RDT081D	84	81	77	75	74	69	61	54	78
RDT120D	86	83	79	77	76	71	63	56	80
DSP005A	78	79	87	84	87	81	78	72	89
DSP006A	70	72	80	77	80	79	76	71	85
DSP010A	81	85	81	84	80	77	73	68	85
DSP018A	87	86	91	86	84	81	76	71	89
DSP025A	87	86	91	86	84	81	76	71	89
Exhaust Fan									
Greencheck	84	92	86	80	76	73	66	61	83

Hz = Hertz; KHz = kilohertz

See Appendix C for manufacturers' specifications.

Parking Lot Activities

Activities from patrons of the parking areas would include vehicle arrival, limited idling of the vehicle, occupants exiting their vehicle, door closure, conversations among passengers, occupants entering the vehicle, vehicle startup, and departure. SoundPLAN was used to model parking lot noise using SoundPLAN database noise sources. The parking lot type was set as "visitors and staff."

3.4 Mobile Source Noise

Noise affecting the project site and surrounding land uses is primarily from traffic on Railroad Avenue and rail operations along the Antelope Valley Line, of which both are located adjacent to and west of the project site. The proposed development is anticipated to generate new vehicular trips on project area roadways. The project would generate approximately 6,993 trips per day (Gibson Transportation Consulting, Inc. 2022). Existing and project generated traffic scenarios were modeled using to determine the increase in traffic noise due to the operation of the project. Off-site traffic noise increases were modeled with the FHWA RD-77-108 Traffic Noise Prediction Model.

Traffic parameters are summarized in Table 7. The posted speed limits for project area roadways ranges from 25 to 50 miles per hour (mph). Traffic distribution through the day applied to traffic noise modeling assumes 97 percent automobiles, 2 percent medium trucks, and 1 percent heavy trucks, which is a typical traffic distribution. Traffic distribution through the day was modeled assuming 80 percent of total daily vehicle traffic during daytime hours and 20 percent of daily vehicle traffic during nighttime hours for modeled roadways.

Table 7 Modeled Traffic Speeds and Volumes

Roadway	Segment	Speed (mph)	Existing	Existing Plus Project No DDEP	Existing Plus Project With DDEP	Existing Plus Project Railroad Crossing Upgrade	Future	Future Plus Project No DDEP	Future Plus Project With DDEP	Future Plus Project Railroad Crossing Upgrade
Bouquet Canyon Road	From the north to Newhall Ranch Road	45	44,350	44,970	44,970	44,970	53,200	53,820	53,820	53,200
	Newhall Ranch Road to Soledad Canyon Road	45	44,450	45,070	45,070	45,070	52,800	53,420	53,420	52,530
	Soledad Canyon Road to Magic Mountain Road	45	31,650	32,590	32,590	32,590	45,100	46,140	47,240	46,300
Railroad Avenue	Magic Mountain Road to Oak Ridge Drive	50	38,420	39,800	39,800	33,700	52,100	53,480	54,980	53,600
	Oak Ridge Drive to 13th Street	50	27,180	28,630	28,630	28,630	31,200	32,650	35,750	34,300
	13th Street to Lyons Avenue	45	28,020	31,400	30,460	31,400	39,200	42,580	36,940	34,500
	Lyons Avenue to Newhall Avenue	35	23,640	25,520	24,580	25,520	28,200	30,080	26,340	25,400
Newhall Avenue	Railroad Avenue to Valle Del Oro	30	34,020	35,900	34,960	35,900	49,200	51,080	46,640	45,700
	Valle Del Oro to Sierra Highway	40	32,010	33,570	32,630	33,570	37,300	38,860	34,520	33,900
Arch Street	13th Street to 12th Street	25	6,890	9,720	8,310	7,630	4,700	10,140	10,470	9,600
Placerita Canyon Road	12th Street to the south	35	2,640	4,010	4,950	4,010	5,900	7,270	12,610	7,690
Dockweiler Drive	Placerita Canyon Road to Valle Del Oro	40	0	1,380	1,630	0	0	0	11,930	10,300
	Valle Del Oro to Sierra Highway	35	4,360	4,360	5,990	4,360	10,100	10,100	8,600	8,600

Roadway	Segment	Speed (mph)	Existing	Existing Plus Project No DDEP	Existing Plus Project With DDEP	Existing Plus Project Railroad Crossing Upgrade	Future	Future Plus Project No DDEP	Future Plus Project With DDEP	Future Plus Project Railroad Crossing Upgrade
Orchard Village Road	Wiley Canyon Road to Lyons Avenue	45	15,230	15,420	15,420	15,420	19,700	19,890	20,190	20,000
	Lyons Avenue to the south	45	7,180	7,370	7,370	7,370	6,200	6,390	7,390	7,200
Wiley Canyon Road	Lyons Avenue to Orchard Village Road	45	17,790	17,980	17,980	17,980	19,800	19,990	22,090	21,900
Sierra Canyon Road	From the north to SR 14 ramps	50	18,990	19,630	19,490	19,630	47,200	47,840	48,100	47,600
	SR 14 ramps to Placerita Canyon Road	50	16,060	16,880	17,030	16,880	39,400	40,220	40,570	40,000
	SR 14 ramps to Placerita Canyon Road	50	18,480	18,600	19,100	18,600	34,900	35,020	41,820	41,200
	Placerita Canyon Road to Dockweiler Road	50	18,640	18,760	20,030	18,760	27,400	27,520	32,790	31,400
	Dockweiler Road to Newhall Avenue	50	14,280	15,060	14,280	14,280	28,800	21,500	23,400	23,400
	Newhall Avenue to the south	50	37,510	37,830	37,830	37,830	40,100	40,420	40,020	39,700
Soledad Canyon Road	Bouquet Canyon Road to Colden Valley Road	50	15,330	15,770	15,770	15,770	28,000	28,440	29,440	29,000
Magic Mountain Road	Railroad Avenue to Tourney Road	35	9,370	9,440	9,440	9,440	18,900	18,070	18,870	18,800
Oak Ridge Drive	Railroad Avenue to Via Princessa	25	6,900	11,720	10,780	11,920	11,700	16,520	13,480	9,600
	Railroad Avenue to Project Entrance	35	11,920	13,430	13,430	13,430	14,300	15,810	16,710	15,200

Roadway	Segment	Speed (mph)	Existing	Existing Plus Project No DDEP	Existing Plus Project With DDEP	Existing Plus Project Railroad Crossing Upgrade	Future	Future Plus Project No DDEP	Future Plus Project With DDEP	Future Plus Project Railroad Crossing Upgrade
13th Street Lyons Avenue	Railroad Avenue to Newhall Avenue	25	24,550	26,060	26,060	26,060	40,500	42,010	43,210	41,700
	Newhall Avenue to Orchard Village Road	35	26,010	27,140	27,140	27,140	33,300	34,430	35,630	34,500
	Orchard Village Road to Wiley Canyon Road	40	25,880	26,820	26,920	26,820	33,200	34,140	35,440	34,500
	Wiley Canyon Road to I-5 ramps	45	44,350	44,970	44,970	44,970	53,200	53,820	53,820	53,200

Source: Gibson Transportation Consulting, Inc 2022

DDEP=Dockweiler Drive Extension Project

I-5=Interstate 5

3.5 Significance Thresholds

The following thresholds are based on City of Santa Clarita General Plan Noise Element Noise Compatibility Guidelines, Santa Clarita Municipal Code, FTA quantitative standard for construction noise, and CEQA Guidelines Appendix G. Noise impacts would be considered significant if:

Threshold 1. The project would result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- Based on FTA Transit Noise and Vibration Impact Assessment (2018) criteria and because the project site and near properties are zoned residential, construction noise would be significant if noise levels exceed 80 dBA Leq for an 8-hour period or construction is conducted outside the allowable hours for construction as stated in 11.44.080 - Construction and Building of the Santa Clarita Municipal Code.
- Operational noise would be significant if operational noise exceeds the daytime (7:00 a.m. to 9:00 p.m.) standard of 65 dBA L_{eq} or the nighttime (9:00 p.m. to 7:00 a.m.) standard of 55 dBA L_{eq} at residential uses and exceeds the daytime standard of 80 dBA L_{eq} or the nighttime standard of 70 dBA L_{eq} at commercial and manufacturing uses.
- For purposes of this analysis, a significant impact would occur if project-related traffic increases the ambient noise environment of noise-sensitive land uses by 3 dBA, which would be a barely perceptible increase in traffic noise.

Threshold 2. The project would result in the generation of excessive groundborne vibration or groundborne noise levels.

- Vibration levels equal to or below 0.4 in./sec. PPV at residential structures would prevent structural damage for most residential building and vibration levels equal to or less than 1.0 in./sec. PPV would prevent damage to more substantial construction, such as high-rise, commercial, and industrial buildings. For human annoyance, the vibration level threshold at which transient, or temporary, vibration sources are considered to be distinctly perceptible is 0.24 in./sec. PPV.

Threshold 3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, if the project exposes people residing or working in the project area to excessive noise levels.

4 Impact Analysis

Noise Threshold 1
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies *(Less Than Significant Impact)*.

Construction

As described in Section 3.1, *Construction Noise*, at a distance of 200 feet, a grader, front-end loader, and a dump truck would generate a noise level of 70 dBA L_{eq}. For residentially zoned properties, the FTA's construction noise limit is 80 dBA; therefore, construction noise levels from the project's on-site and off-site construction would not exceed construction noise thresholds. Furthermore, construction activities would be restricted to established time limitations pursuant to the Santa Clarita Municipal Code Section 11.44.080 of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. Further, no work shall be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day, and Labor Day. Therefore, project construction noise impacts from on-site and off-site construction would be less than significant.

Operation

Overall Continuous On-site Operational Noise

To determine the total continuous operational noise level at adjacent land uses, HVAC units, exhaust fans, and parking lot activities were modeled. Receiver locations and noise level contours are shown on Figure 5 and noise levels are shown in Table 8.

Figure 5 Modeled Receivers and Noise Contours

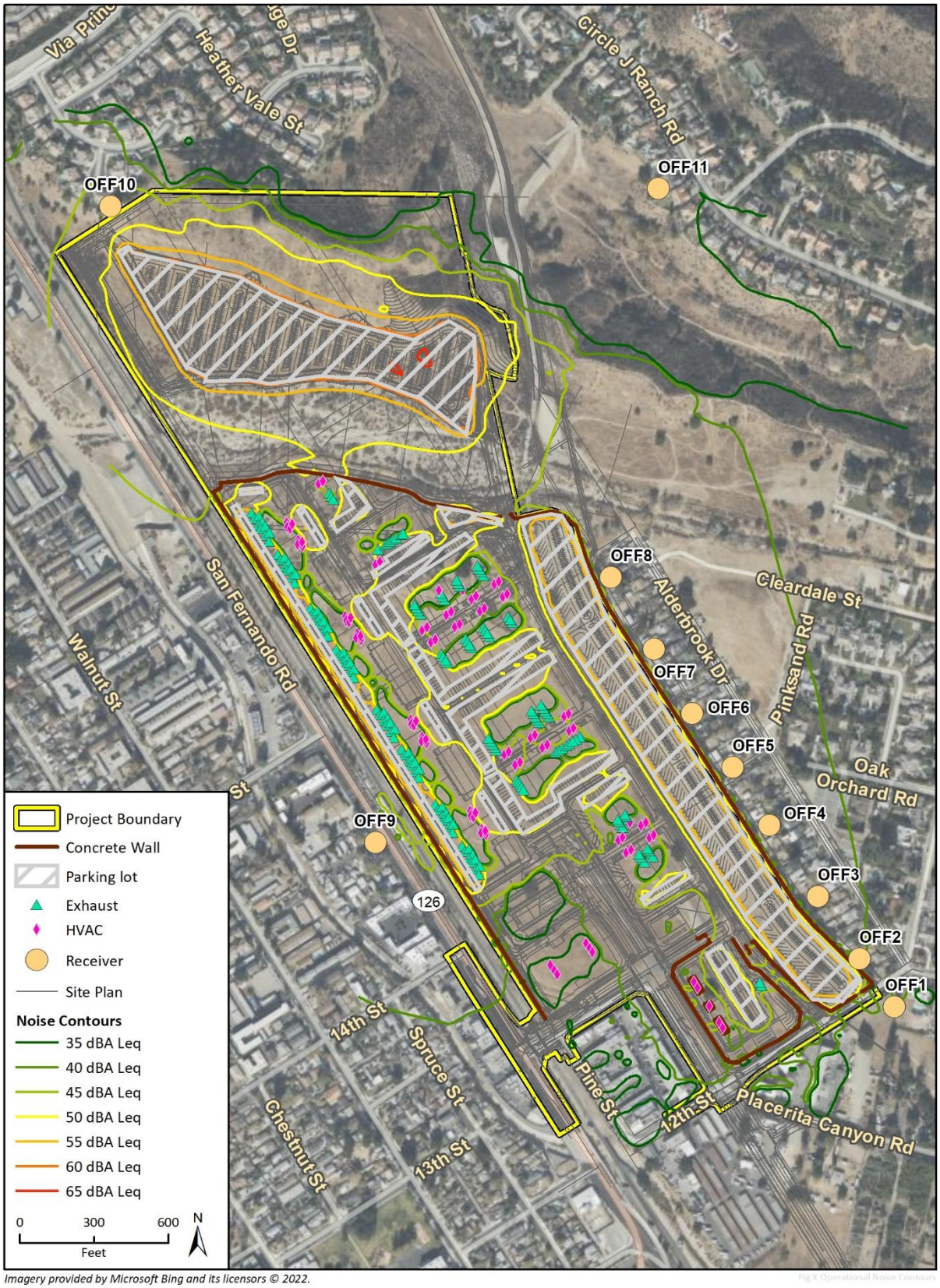


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Table 8 Operational Noise

Receiver	Description	Noise Level (dBA L_{eq})[1]	Exceedance	
			Daytime Threshold[2]	Nighttime Threshold?[3]
OFF1	Residence - east	40	No	No
OFF2	Residence - east	40	No	No
OFF3	Residence - east	41	No	No
OFF4	Residence - east	42	No	No
OFF5	Residence - east	43	No	No
OFF6	Residence - east	43	No	No
OFF7	Residence - east	44	No	No
OFF8	Residence - east	44	No	No
OFF9	Mobile Home Park - west	44	No	No
OFF10	Residence - north	47	No	No
OFF11	Residence - northeast	34	No	No

[1] Operational noise includes HVAC units, exhaust fans, and parking lot activities.

[2] Daytime thresholds would be exceeded if exterior noise levels exceed 65 dBA at residential uses and 80 dBA at commercial uses from 7:00 a.m. to 10:00 p.m.

[3] Nighttime thresholds would be exceeded if exterior noise levels exceed 55 dBA at residential uses and 70 dBA at commercial uses from 10:00 p.m. to 7:00 a.m.

See Figure 5 for receiver locations.

As shown in Table 8, operational activities on the project site would generate exterior noise levels ranging from 34 dBA L_{eq} to 47 dBA L_{eq} at the nearest off-site sensitive receivers located adjacent to the project site. Impacts would be significant if project-related operational noise exceeds 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and 55 dBA L_{eq} during nighttime hours (10:00 p.m. to 7:00 a.m.) for residential uses. The combined operational noise from HVAC, exhaust fan, and parking lot noise would not exceed Santa Clarita's daytime and nighttime noise standards at noise sensitive uses adjacent to the project site. Therefore, operational noise levels would be less than significant.

Off-site Traffic Noise

The project would generate new vehicle trips that would increase noise levels on nearby roadways. The increase in roadway noise with the addition of project traffic is shown in Table 9 for existing scenarios and Table 10 for future scenarios. Due to the relatively small increase in overall project contribution traffic volumes from project-generated traffic, noise level increases of less than 1 dBA to 1 dBA L_{dn} for the majority of the roadway segments modeled. Two roadway segments resulted in traffic noise level increases of 3 dBA, however, there are no sensitive receivers along these segments Therefore, the project's traffic noise increase would not exceed 3 dBA or more at noise sensitive land uses, and impacts would be less than significant.

Table 9 Offsite Traffic Noise Increases, dBA L_{dn} at 50 Feet – Existing Scenarios

Roadway	Segment	Existing	Existing Plus Project No DDEP	Change	Existing Plus Project With DDEP	Change	Existing Plus Project Railroad Crossing Upgrade	Change
Bouquet Canyon Road	From the north to Newhall Ranch Road	74	74	<1	74	<1	74	<1
	Newhall Ranch Road to Soledad Canyon Road	74	74	<1	74	<1	74	<1
	Soledad Canyon Road to Magic Mountain Road	73	73	<1	73	<1	73	<1
Railroad Avenue	Magic Mountain Road to Oak Ridge Drive	74	74	<1	74	<1	74	-1
	Oak Ridge Drive to 13th Street	73	73	<1	73	<1	73	<1
	13th Street to Lyons Avenue	72	73	<1	72	<1	73	<1
	Lyons Avenue to Newhall Avenue	70	70	<1	70	<1	70	<1
Newhall Avenue	Railroad Avenue to Valle Del Oro	71	72	<1	72	<1	72	<1
	Valle Del Oro to Sierra Highway	72	72	<1	72	<1	72	<1
Arch Street	13th Street to 12th Street	65	66	1	65	1	65	<1
Placerita Canyon Road	12th Street to the south	61	62	2	63	**3**	62	2
Dockweiler Drive	Placerita Canyon Road to Valle Del Oro	--	58	--	59	--	--	--
	Valle Del Oro to Sierra Highway	63	63	<1	64	1	63	<1
Orchard Village Road	Wiley Canyon Road to Lyons Avenue	69	69	<1	69	<1	69	<1
	Lyons Avenue to the south	66	66	<1	66	<1	66	<1
Wiley Canyon Road	Lyons Avenue to Orchard Village Road	70	70	<1	70	<1	70	<1
Sierra Canyon Road	From the north to SR 14 ramps	71	71	<1	71	<1	71	<1
	SR 14 ramps to Placerita Canyon Road	70	71	<1	71	<1	71	<1
	SR 14 ramps to Placerita Canyon Road	71	71	<1	71	<1	71	<1
	Placerita Canyon Road to Dockweiler Road	71	71	<1	71	<1	71	<1
	Dockweiler Road to Newhall Avenue	70	70	<1	70	<1	70	<1
	Newhall Avenue to the south	74	74	<1	74	<1	74	<1

Roadway	Segment	Existing	Existing Plus Project No DDEP	Change	Existing Plus Project With DDEP	Change	Existing Plus Project Railroad Crossing Upgrade	Change
Soledad Canyon Road	Bouquet Canyon Road to Colden Valley Road	70	70	<1	70	<1	70	<1
Magic Mountain Road	Railroad Avenue to Tourney Road	66	66	<1	66	<1	66	<1
Oak Ridge Drive	Railroad Avenue to Via Princessa	65	67	2	67	2	67	2
13th Street	Railroad Avenue to Project Entrance	67	68	1	68	1	68	1
Lyons Avenue	Railroad Avenue to Newhall Avenue	70	70	<1	70	<1	70	<1
	Newhall Avenue to Orchard Village Road	70	71	<1	71	<1	71	<1
	Orchard Village Road to Wiley Canyon Road	71	71	<1	71	<1	71	<1
	Wiley Canyon Road to I-5 ramps	74	74	<1	74	<1	74	<1

Source: Gibson Transportation Consulting, Inc., Transportation Assessment of the Blackhall Studios Project, 2022

DDEP=Dockweiler Drive Extension Project

I-5 = Interstate 5

Table 10 Offsite Traffic Noise Increases, dBA L_{dn} at 50 Feet – Future Scenarios

Roadway	Segment	Future No Project No DDEP	Future No Project With DDEP	Change	Future Plus Project No DDEP	Change	Future Plus Project With DDEP	Change
Bouquet Canyon Road	from the north to Newhall Ranch Road	75	75	<1	75	<1	75	<1
	Newhall Ranch Road to Soledad Canyon Road	75	75	<1	75	<1	75	<1
	Soledad Canyon Road to Magic Mountain Road	74	74	<1	74	<1	74	<1
Railroad Avenue	Magic Mountain Road to Oak Ridge Drive	76	76	<1	76	<1	76	<1
	Oak Ridge Drive to 13th Street	73	74	<1	74	<1	74	<1
	13th Street to Lyons Avenue	74	73	-1	74	<1	73	<1
	Lyons Avenue to Newhall Avenue	71	70	<1	71	<1	71	<1
Newhall Avenue	Railroad Avenue to Valle Del Oro	73	73	<1	73	<1	73	<1
	Valle Del Oro to Sierra Highway	73	72	<1	73	<1	72	<1

Roadway	Segment	Future No Project No DDEP	Future No Project With DDEP	Change	Future Plus Project No DDEP	Change	Future Plus Project With DDEP	Change
Arch Street	13th Street to 12th Street	63	66	**3**	66	**3**	66	<1
Placerita Canyon Road	12th Street to the south	64	65	1	65	1	67	2
Dockweiler Drive	Placerita Canyon Road to Valle Del Oro	–	67	–	–	–	68	–
	Valle Del Oro to Sierra Highway	66	66	-1	66	<1	66	<1
Orchard Village Road	Wiley Canyon Road to Lyons Avenue	71	71	<1	71	<1	71	<1
	Lyons Avenue to the south	66	66	1	66	<1	66	<1
Wiley Canyon Road	Lyons Avenue to Orchard Village Road	71	71	0	71	<1	71	<1
Sierra Canyon Road	From the north to SR 14 ramps	75	75	0	75	<1	75	<1
	SR 14 ramps to Placerita Canyon Road	74	74	0	74	<1	75	<1
	SR 14 ramps to Placerita Canyon Road	74	75	1	74	<1	75	<1
	Placerita Canyon Road to Dockweiler Road	73	73	1	73	<1	74	<1
	Dockweiler Road to Newhall Avenue	73	72	-1	72	-1	72	<1
	Newhall Avenue to the south	74	74	<1	75	<1	74	<1
Soledad Canyon Road	Bouquet Canyon Road to Colden Valley Road	73	73	<1	73	<1	73	<1
Magic Mountain Road	Railroad Avenue to Tourney Road	69	69	<1	69	<1	69	<1
Oak Ridge Drive	Railroad Avenue to Via Princessa	67	66	-1	68	1	68	1
13th Street Lyons Avenue	Railroad Avenue to Project Entrance	68	68	<1	68	<1	69	<1
	Railroad Avenue to Newhall Avenue	72	72	<1	72	<1	73	<1
	Newhall Avenue to Orchard Village Road	72	72	<1	72	<1	72	<1
	Orchard Village Road to Wiley Canyon Road	72	72	<1	72	<1	72	<1
	Wiley Canyon Road to I-5 ramps	75	75	<1	75	<1	75	<1

Source: Gibson Transportation Consulting, Inc., Transportation Assessment of the Blackhall Studios Project, 2022

DDEP=Dockweiler Drive Extension Project

I-5 = Interstate 5

Noise Threshold 2
Generation of excessive groundborne vibration or groundborne noise levels *(Less Than Significant Impact)*.

Construction activities known to generate excessive groundborne vibration, such as pile driving, would not be required to implement the project. The greatest anticipated source of vibration during general project construction activities would be from a large bulldozer, which may be used within 35 feet of the nearest off-site structure during construction of the proposed 12-foot perimeter wall (off-site roadway improvements would occur at a further distance and therefore 35 feet is a conservative assumption for on-site and off-site improvements). A large bulldozer was used as a proxy for an excavator for the purpose of this analysis as they create similar vibration levels during construction activities. A large bulldozer creates approximately 0.089 in/sec PPV at a distance of 25 feet (Caltrans 2013). This would equal a vibration level of 0.061 in/sec PPV at 35 feet. This vibration level is lower than the human annoyance threshold of 0.24 in/sec PPV and the residential damage threshold of 0.4 in./sec. PPV. Therefore, temporary vibration impacts associated with on-site and off-site construction would be less than significant.

The project does not include any substantial vibration sources associated with operation. Therefore, operational vibration impacts would be less than significant.

Noise Threshold 3
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, of the project expose people residing or working in the project area to excessive noise levels *(No Impact)*.

The Whiteman Airport is the nearest public airport, located approximately 11 miles to the southeast of the project site. According to the noise compatibility contours figure for the Whiteman Airport in the Whiteman Airport Master Plan, the project site is located outside the airport's 60 CNEL noise contour (Los Angeles County Airports 2011). Therefore, no substantial noise exposure from airport noise would occur to construction workers, users, or employees on the project sites, and no impacts would occur.

5 Conclusions

The project would generate both temporary construction-related noise and long-term noise associated with operation of the project. Construction noise would not exceed FTA noise standards at the nearby land uses and impacts from construction noise would be less than significant.

Combined operational activities on the project site would generate noise levels up to 47 dBA L_{eq} at off-site residential receivers. Therefore, the combined operational noise from HVAC, exhaust fans, and parking lot activities would not exceed the City's daytime or nighttime noise standard, and impacts from operation noise would be less than significant.

Project-generated traffic would generate up to an increase of 2 dBA at adjacent roadways. This is below the threshold of 3 dBA; therefore, the off-site traffic noise increase would be less than significant.

The project would generate groundborne vibration during construction. However, construction-generated groundborne vibration would not exceed the applicable vibration threshold at the nearest structures, and construction-related vibration impacts would be less than significant.

The project site is outside the noise contours for the Whiteman Airport. Therefore, no substantial noise exposure would occur to construction workers, employees, or users of the project from aircraft noise.

Given the aforementioned, the project would result in less than significant impacts.

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Appendix A

Noise Measurement Data

NM1

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 54.8 - 2021/11/18 12:58:58
- Level Range : 30-90
- SEL : 72.5
- Leq : 43.0
-

No.s	Date Time	(dB)
1	2021/11/18 12:51:09	42.0
2	2021/11/18 12:51:12	43.2
3	2021/11/18 12:51:15	40.4
4	2021/11/18 12:51:18	38.8
5	2021/11/18 12:51:21	42.6
6	2021/11/18 12:51:24	43.2
7	2021/11/18 12:51:27	49.6
8	2021/11/18 12:51:30	48.4
9	2021/11/18 12:51:33	46.2
10	2021/11/18 12:51:36	47.4
11	2021/11/18 12:51:39	43.4
12	2021/11/18 12:51:42	45.1
13	2021/11/18 12:51:45	43.3
14	2021/11/18 12:51:48	45.6
15	2021/11/18 12:51:51	43.4
16	2021/11/18 12:51:54	42.2
17	2021/11/18 12:51:57	41.5
18	2021/11/18 12:52:00	43.3
19	2021/11/18 12:52:03	43.7
20	2021/11/18 12:52:06	45.4
21	2021/11/18 12:52:09	44.1
22	2021/11/18 12:52:12	42.1
23	2021/11/18 12:52:15	42.1
24	2021/11/18 12:52:18	41.1
25	2021/11/18 12:52:21	39.6
26	2021/11/18 12:52:24	40.7
27	2021/11/18 12:52:27	41.5
28	2021/11/18 12:52:30	41.6
29	2021/11/18 12:52:33	42.7
30	2021/11/18 12:52:36	42.3
31	2021/11/18 12:52:39	43.7
32	2021/11/18 12:52:42	42.5
33	2021/11/18 12:52:45	41.8
34	2021/11/18 12:52:48	41.6
35	2021/11/18 12:52:51	41.0
36	2021/11/18 12:52:54	44.5
37	2021/11/18 12:52:57	40.8
38	2021/11/18 12:53:00	39.6
39	2021/11/18 12:53:03	43.6
40	2021/11/18 12:53:06	47.8
41	2021/11/18 12:53:09	43.3
42	2021/11/18 12:53:12	40.5
43	2021/11/18 12:53:15	41.3
44	2021/11/18 12:53:18	40.3
45	2021/11/18 12:53:21	45.7
46	2021/11/18 12:53:24	47.8
47	2021/11/18 12:53:27	50.3
48	2021/11/18 12:53:30	48.2
49	2021/11/18 12:53:33	48.3
50	2021/11/18 12:53:36	48.4
51	2021/11/18 12:53:39	45.1
52	2021/11/18 12:53:42	45.6
53	2021/11/18 12:53:45	43.5
54	2021/11/18 12:53:48	49.4
55	2021/11/18 12:53:51	46.4
56	2021/11/18 12:53:54	45.9
57	2021/11/18 12:53:57	45.7
58	2021/11/18 12:54:00	46.2
59	2021/11/18 12:54:03	45.1
60	2021/11/18 12:54:06	44.7
61	2021/11/18 12:54:09	43.6
62	2021/11/18 12:54:12	42.6
63	2021/11/18 12:54:15	43.6
64	2021/11/18 12:54:18	42.3
65	2021/11/18 12:54:21	44.4
66	2021/11/18 12:54:24	41.7
67	2021/11/18 12:54:27	44.4
68	2021/11/18 12:54:30	40.8
69	2021/11/18 12:54:33	40.9
70	2021/11/18 12:54:36	42.8
71	2021/11/18 12:54:39	40.9
72	2021/11/18 12:54:42	40.2
73	2021/11/18 12:54:45	41.8
74	2021/11/18 12:54:48	45.0
75	2021/11/18 12:54:51	42.4
76	2021/11/18 12:54:54	46.3
77	2021/11/18 12:54:57	42.8
78	2021/11/18 12:55:00	44.8
79	2021/11/18 12:55:03	44.4
80	2021/11/18 12:55:06	44.1
81	2021/11/18 12:55:09	40.8
82	2021/11/18 12:55:12	39.4
83	2021/11/18 12:55:15	38.7
84	2021/11/18 12:55:18	36.9
85	2021/11/18 12:55:21	36.8
86	2021/11/18 12:55:24	37.5
87	2021/11/18 12:55:27	37.3
88	2021/11/18 12:55:30	36.7
89	2021/11/18 12:55:33	36.4
90	2021/11/18 12:55:36	39.2

91	2021/11/18	12:55:39	36.5
92	2021/11/18	12:55:42	38.5
93	2021/11/18	12:55:45	41.2
94	2021/11/18	12:55:48	40.2
95	2021/11/18	12:55:51	41.6
96	2021/11/18	12:55:54	41.6
97	2021/11/18	12:55:57	43.7
98	2021/11/18	12:56:00	41.9
99	2021/11/18	12:56:03	41.3
100	2021/11/18	12:56:06	41.1
101	2021/11/18	12:56:09	41.6
102	2021/11/18	12:56:12	39.8
103	2021/11/18	12:56:15	40.4
104	2021/11/18	12:56:18	40.9
105	2021/11/18	12:56:21	44.9
106	2021/11/18	12:56:24	44.3
107	2021/11/18	12:56:27	41.4
108	2021/11/18	12:56:30	42.6
109	2021/11/18	12:56:33	40.8
110	2021/11/18	12:56:36	40.6
111	2021/11/18	12:56:39	43.4
112	2021/11/18	12:56:42	46.0
113	2021/11/18	12:56:45	45.8
114	2021/11/18	12:56:48	44.8
115	2021/11/18	12:56:51	43.5
116	2021/11/18	12:56:54	42.3
117	2021/11/18	12:56:57	41.2
118	2021/11/18	12:57:00	42.5
119	2021/11/18	12:57:03	42.2
120	2021/11/18	12:57:06	41.5
121	2021/11/18	12:57:09	41.2
122	2021/11/18	12:57:12	41.6
123	2021/11/18	12:57:15	42.4
124	2021/11/18	12:57:18	42.3
125	2021/11/18	12:57:21	42.8
126	2021/11/18	12:57:24	42.9
127	2021/11/18	12:57:27	42.0
128	2021/11/18	12:57:30	41.0
129	2021/11/18	12:57:33	41.3
130	2021/11/18	12:57:36	40.5
131	2021/11/18	12:57:39	40.5
132	2021/11/18	12:57:42	44.7
133	2021/11/18	12:57:45	42.2
134	2021/11/18	12:57:48	41.2
135	2021/11/18	12:57:51	41.4
136	2021/11/18	12:57:54	44.2
137	2021/11/18	12:57:57	42.7
138	2021/11/18	12:58:00	43.9
139	2021/11/18	12:58:03	43.5
140	2021/11/18	12:58:06	43.9
141	2021/11/18	12:58:09	43.0
142	2021/11/18	12:58:12	44.0
143	2021/11/18	12:58:15	42.2
144	2021/11/18	12:58:18	42.0
145	2021/11/18	12:58:21	43.6
146	2021/11/18	12:58:24	45.2
147	2021/11/18	12:58:27	42.5
148	2021/11/18	12:58:30	40.8
149	2021/11/18	12:58:33	41.3
150	2021/11/18	12:58:36	40.6
151	2021/11/18	12:58:39	42.1
152	2021/11/18	12:58:42	42.9
153	2021/11/18	12:58:45	44.8
154	2021/11/18	12:58:48	47.4
155	2021/11/18	12:58:51	48.1
156	2021/11/18	12:58:54	53.1
157	2021/11/18	12:58:57	53.9
158	2021/11/18	12:59:00	51.5
159	2021/11/18	12:59:03	49.8
160	2021/11/18	12:59:06	47.1
161	2021/11/18	12:59:09	46.5
162	2021/11/18	12:59:12	46.4
163	2021/11/18	12:59:15	44.4
164	2021/11/18	12:59:18	43.1
165	2021/11/18	12:59:21	42.0
166	2021/11/18	12:59:24	41.1
167	2021/11/18	12:59:27	41.2
168	2021/11/18	12:59:30	41.3
169	2021/11/18	12:59:33	41.4
170	2021/11/18	12:59:36	39.3
171	2021/11/18	12:59:39	40.3
172	2021/11/18	12:59:42	41.2
173	2021/11/18	12:59:45	39.1
174	2021/11/18	12:59:48	40.7
175	2021/11/18	12:59:51	39.3
176	2021/11/18	12:59:54	39.5
177	2021/11/18	12:59:57	39.9
178	2021/11/18	13:00:00	39.9
179	2021/11/18	13:00:03	41.2
180	2021/11/18	13:00:06	44.3
181	2021/11/18	13:00:09	43.0
182	2021/11/18	13:00:12	42.1
183	2021/11/18	13:00:15	39.4
184	2021/11/18	13:00:18	37.3
185	2021/11/18	13:00:21	36.4
186	2021/11/18	13:00:24	38.2
187	2021/11/18	13:00:27	39.0
188	2021/11/18	13:00:30	39.7
189	2021/11/18	13:00:33	40.9
190	2021/11/18	13:00:36	40.1
191	2021/11/18	13:00:39	41.4
192	2021/11/18	13:00:42	39.2
193	2021/11/18	13:00:45	42.0
194	2021/11/18	13:00:48	39.1

195	2021/11/18	13:00:51	40.7
196	2021/11/18	13:00:54	40.8
197	2021/11/18	13:00:57	38.7
198	2021/11/18	13:01:00	39.2
199	2021/11/18	13:01:03	39.1
200	2021/11/18	13:01:06	40.3
201	2021/11/18	13:01:09	41.6
202	2021/11/18	13:01:12	40.5
203	2021/11/18	13:01:15	42.3
204	2021/11/18	13:01:18	42.1
205	2021/11/18	13:01:21	39.9
206	2021/11/18	13:01:24	39.3
207	2021/11/18	13:01:27	38.9
208	2021/11/18	13:01:30	37.9
209	2021/11/18	13:01:33	38.5
210	2021/11/18	13:01:36	37.9
211	2021/11/18	13:01:39	38.7
212	2021/11/18	13:01:42	39.1
213	2021/11/18	13:01:45	39.1
214	2021/11/18	13:01:48	40.1
215	2021/11/18	13:01:51	41.8
216	2021/11/18	13:01:54	44.0
217	2021/11/18	13:01:57	41.8
218	2021/11/18	13:02:00	40.6
219	2021/11/18	13:02:03	39.5
220	2021/11/18	13:02:06	38.6
221	2021/11/18	13:02:09	37.0
222	2021/11/18	13:02:12	36.5
223	2021/11/18	13:02:15	37.5
224	2021/11/18	13:02:18	40.9
225	2021/11/18	13:02:21	40.2
226	2021/11/18	13:02:24	40.5
227	2021/11/18	13:02:27	42.4
228	2021/11/18	13:02:30	42.1
229	2021/11/18	13:02:33	40.8
230	2021/11/18	13:02:36	40.4
231	2021/11/18	13:02:39	39.4
232	2021/11/18	13:02:42	40.1
233	2021/11/18	13:02:45	40.6
234	2021/11/18	13:02:48	41.7
235	2021/11/18	13:02:51	41.4
236	2021/11/18	13:02:54	42.0
237	2021/11/18	13:02:57	41.9
238	2021/11/18	13:03:00	41.2
239	2021/11/18	13:03:03	41.3
240	2021/11/18	13:03:06	40.8
241	2021/11/18	13:03:09	39.7
242	2021/11/18	13:03:12	39.9
243	2021/11/18	13:03:15	39.8
244	2021/11/18	13:03:18	39.3
245	2021/11/18	13:03:21	41.3
246	2021/11/18	13:03:24	43.2
247	2021/11/18	13:03:27	43.8
248	2021/11/18	13:03:30	42.5
249	2021/11/18	13:03:33	42.3
250	2021/11/18	13:03:36	40.3
251	2021/11/18	13:03:39	40.9
252	2021/11/18	13:03:42	38.3
253	2021/11/18	13:03:45	37.7
254	2021/11/18	13:03:48	38.3
255	2021/11/18	13:03:51	38.8
256	2021/11/18	13:03:54	37.6
257	2021/11/18	13:03:57	37.8
258	2021/11/18	13:04:00	38.0
259	2021/11/18	13:04:03	38.5
260	2021/11/18	13:04:06	40.4
261	2021/11/18	13:04:09	39.0
262	2021/11/18	13:04:12	39.8
263	2021/11/18	13:04:15	42.9
264	2021/11/18	13:04:18	44.1
265	2021/11/18	13:04:21	41.3
266	2021/11/18	13:04:24	41.9
267	2021/11/18	13:04:27	42.5
268	2021/11/18	13:04:30	42.9
269	2021/11/18	13:04:33	42.9
270	2021/11/18	13:04:36	40.7
271	2021/11/18	13:04:39	40.3
272	2021/11/18	13:04:42	40.8
273	2021/11/18	13:04:45	42.8
274	2021/11/18	13:04:48	42.5
275	2021/11/18	13:04:51	41.6
276	2021/11/18	13:04:54	40.3
277	2021/11/18	13:04:57	40.6
278	2021/11/18	13:05:00	43.4
279	2021/11/18	13:05:03	41.6
280	2021/11/18	13:05:06	43.0
281	2021/11/18	13:05:09	40.7
282	2021/11/18	13:05:12	38.2
283	2021/11/18	13:05:15	38.8
284	2021/11/18	13:05:18	38.3
285	2021/11/18	13:05:21	40.6
286	2021/11/18	13:05:24	39.9
287	2021/11/18	13:05:27	43.0
288	2021/11/18	13:05:30	40.1
289	2021/11/18	13:05:33	39.9
290	2021/11/18	13:05:36	43.8
291	2021/11/18	13:05:39	42.1
292	2021/11/18	13:05:42	42.4
293	2021/11/18	13:05:45	41.6
294	2021/11/18	13:05:48	42.6
295	2021/11/18	13:05:51	41.7
296	2021/11/18	13:05:54	42.3
297	2021/11/18	13:05:57	41.8
298	2021/11/18	13:06:00	40.9

299	2021/11/18 13:06:03	41.3
300	2021/11/18 13:06:06	41.0

NM2

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 53.7 - 2021/11/18 13:26:00
- Level Range : 30-90
- SEL : 70.6
- Leq : 41.1
-

No.s	Date Time	(dB)
1	2021/11/18 13:11:08	40.1
2	2021/11/18 13:11:11	41.9
3	2021/11/18 13:11:14	37.9
4	2021/11/18 13:11:17	44.3
5	2021/11/18 13:11:20	38.0
6	2021/11/18 13:11:23	41.5
7	2021/11/18 13:11:26	35.9
8	2021/11/18 13:11:29	35.9
9	2021/11/18 13:11:32	36.3
10	2021/11/18 13:11:35	37.4
11	2021/11/18 13:11:38	36.8
12	2021/11/18 13:11:41	35.6
13	2021/11/18 13:11:44	35.2
14	2021/11/18 13:11:47	34.9
15	2021/11/18 13:11:50	36.1
16	2021/11/18 13:11:53	36.9
17	2021/11/18 13:11:56	36.1
18	2021/11/18 13:11:59	35.6
19	2021/11/18 13:12:02	35.0
20	2021/11/18 13:12:05	35.2
21	2021/11/18 13:12:08	35.0
22	2021/11/18 13:12:11	35.1
23	2021/11/18 13:12:14	35.0
24	2021/11/18 13:12:17	35.4
25	2021/11/18 13:12:20	35.7
26	2021/11/18 13:12:23	36.3
27	2021/11/18 13:12:26	36.2
28	2021/11/18 13:12:29	35.7
29	2021/11/18 13:12:32	35.3
30	2021/11/18 13:12:35	38.3
31	2021/11/18 13:12:38	36.4
32	2021/11/18 13:12:41	35.9
33	2021/11/18 13:12:44	36.8
34	2021/11/18 13:12:47	36.8
35	2021/11/18 13:12:50	36.6
36	2021/11/18 13:12:53	36.1
37	2021/11/18 13:12:56	35.5
38	2021/11/18 13:12:59	35.2
39	2021/11/18 13:13:02	35.2
40	2021/11/18 13:13:05	36.4
41	2021/11/18 13:13:08	36.2
42	2021/11/18 13:13:11	37.1
43	2021/11/18 13:13:14	39.1
44	2021/11/18 13:13:17	37.5
45	2021/11/18 13:13:20	35.5
46	2021/11/18 13:13:23	35.0
47	2021/11/18 13:13:26	34.4
48	2021/11/18 13:13:29	34.3
49	2021/11/18 13:13:32	34.7
50	2021/11/18 13:13:35	35.3
51	2021/11/18 13:13:38	35.4
52	2021/11/18 13:13:41	34.7
53	2021/11/18 13:13:44	35.2
54	2021/11/18 13:13:47	35.5
55	2021/11/18 13:13:50	35.6
56	2021/11/18 13:13:53	36.5
57	2021/11/18 13:13:56	36.7
58	2021/11/18 13:13:59	37.2
59	2021/11/18 13:14:02	35.2
60	2021/11/18 13:14:05	34.6
61	2021/11/18 13:14:08	35.4
62	2021/11/18 13:14:11	35.7
63	2021/11/18 13:14:14	38.1
64	2021/11/18 13:14:17	38.4
65	2021/11/18 13:14:20	39.6
66	2021/11/18 13:14:23	38.9
67	2021/11/18 13:14:26	39.0
68	2021/11/18 13:14:29	39.4
69	2021/11/18 13:14:32	37.9
70	2021/11/18 13:14:35	38.8
71	2021/11/18 13:14:38	39.2
72	2021/11/18 13:14:41	40.3
73	2021/11/18 13:14:44	39.7
74	2021/11/18 13:14:47	39.9
75	2021/11/18 13:14:50	41.7
76	2021/11/18 13:14:53	41.1
77	2021/11/18 13:14:56	40.6
78	2021/11/18 13:14:59	38.6
79	2021/11/18 13:15:02	37.5
80	2021/11/18 13:15:05	36.8
81	2021/11/18 13:15:08	36.6
82	2021/11/18 13:15:11	37.0
83	2021/11/18 13:15:14	39.8
84	2021/11/18 13:15:17	42.1
85	2021/11/18 13:15:20	44.3
86	2021/11/18 13:15:23	44.3
87	2021/11/18 13:15:26	48.2
88	2021/11/18 13:15:29	48.6
89	2021/11/18 13:15:32	47.6
90	2021/11/18 13:15:35	45.4

91	2021/11/18	13:15:38	44.5
92	2021/11/18	13:15:41	43.6
93	2021/11/18	13:15:44	42.2
94	2021/11/18	13:15:47	40.8
95	2021/11/18	13:15:50	41.1
96	2021/11/18	13:15:53	40.1
97	2021/11/18	13:15:56	45.2
98	2021/11/18	13:15:59	42.0
99	2021/11/18	13:16:02	39.4
100	2021/11/18	13:16:05	37.7
101	2021/11/18	13:16:08	36.4
102	2021/11/18	13:16:11	35.9
103	2021/11/18	13:16:14	36.4
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105	2021/11/18	13:16:20	38.0
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111	2021/11/18	13:16:38	38.3
112	2021/11/18	13:16:41	37.3
113	2021/11/18	13:16:44	37.0
114	2021/11/18	13:16:47	38.3
115	2021/11/18	13:16:50	37.3
116	2021/11/18	13:16:53	36.5
117	2021/11/18	13:16:56	38.0
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119	2021/11/18	13:17:02	35.9
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121	2021/11/18	13:17:08	38.7
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123	2021/11/18	13:17:14	38.9
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125	2021/11/18	13:17:20	39.7
126	2021/11/18	13:17:23	41.2
127	2021/11/18	13:17:26	40.3
128	2021/11/18	13:17:29	37.4
129	2021/11/18	13:17:32	39.4
130	2021/11/18	13:17:35	38.1
131	2021/11/18	13:17:38	37.1
132	2021/11/18	13:17:41	36.2
133	2021/11/18	13:17:44	36.0
134	2021/11/18	13:17:47	36.3
135	2021/11/18	13:17:50	35.9
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137	2021/11/18	13:17:56	36.0
138	2021/11/18	13:17:59	37.0
139	2021/11/18	13:18:02	37.3
140	2021/11/18	13:18:05	36.3
141	2021/11/18	13:18:08	36.0
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178	2021/11/18	13:19:59	41.6
179	2021/11/18	13:20:02	42.8
180	2021/11/18	13:20:05	41.0
181	2021/11/18	13:20:08	42.5
182	2021/11/18	13:20:11	42.8
183	2021/11/18	13:20:14	43.9
184	2021/11/18	13:20:17	42.0
185	2021/11/18	13:20:20	43.0
186	2021/11/18	13:20:23	43.2
187	2021/11/18	13:20:26	41.5
188	2021/11/18	13:20:29	40.9
189	2021/11/18	13:20:32	42.0
190	2021/11/18	13:20:35	40.3
191	2021/11/18	13:20:38	38.6
192	2021/11/18	13:20:41	38.8
193	2021/11/18	13:20:44	39.2
194	2021/11/18	13:20:47	41.1

195	2021/11/18	13:20:50	41.1
196	2021/11/18	13:20:53	41.9
197	2021/11/18	13:20:56	40.5
198	2021/11/18	13:20:59	40.7
199	2021/11/18	13:21:02	41.2
200	2021/11/18	13:21:05	41.6
201	2021/11/18	13:21:08	40.5
202	2021/11/18	13:21:11	39.3
203	2021/11/18	13:21:14	38.8
204	2021/11/18	13:21:17	40.6
205	2021/11/18	13:21:20	37.2
206	2021/11/18	13:21:23	37.1
207	2021/11/18	13:21:26	41.2
208	2021/11/18	13:21:29	39.6
209	2021/11/18	13:21:32	38.6
210	2021/11/18	13:21:35	39.2
211	2021/11/18	13:21:38	38.9
212	2021/11/18	13:21:41	40.2
213	2021/11/18	13:21:44	40.0
214	2021/11/18	13:21:47	38.8
215	2021/11/18	13:21:50	39.2
216	2021/11/18	13:21:53	38.5
217	2021/11/18	13:21:56	39.1
218	2021/11/18	13:21:59	41.9
219	2021/11/18	13:22:02	41.3
220	2021/11/18	13:22:05	42.5
221	2021/11/18	13:22:08	44.5
222	2021/11/18	13:22:11	45.5
223	2021/11/18	13:22:14	45.9
224	2021/11/18	13:22:17	44.6
225	2021/11/18	13:22:20	45.7
226	2021/11/18	13:22:23	45.4
227	2021/11/18	13:22:26	45.0
228	2021/11/18	13:22:29	42.1
229	2021/11/18	13:22:32	42.9
230	2021/11/18	13:22:35	41.6
231	2021/11/18	13:22:38	44.1
232	2021/11/18	13:22:41	43.4
233	2021/11/18	13:22:44	43.0
234	2021/11/18	13:22:47	43.5
235	2021/11/18	13:22:50	42.6
236	2021/11/18	13:22:53	42.2
237	2021/11/18	13:22:56	42.5
238	2021/11/18	13:22:59	42.2
239	2021/11/18	13:23:02	41.7
240	2021/11/18	13:23:05	41.5
241	2021/11/18	13:23:08	41.2
242	2021/11/18	13:23:11	42.1
243	2021/11/18	13:23:14	42.6
244	2021/11/18	13:23:17	42.6
245	2021/11/18	13:23:20	42.9
246	2021/11/18	13:23:23	44.7
247	2021/11/18	13:23:26	45.5
248	2021/11/18	13:23:29	42.3
249	2021/11/18	13:23:32	40.4
250	2021/11/18	13:23:35	40.7
251	2021/11/18	13:23:38	40.6
252	2021/11/18	13:23:41	40.5
253	2021/11/18	13:23:44	41.2
254	2021/11/18	13:23:47	41.8
255	2021/11/18	13:23:50	42.6
256	2021/11/18	13:23:53	42.2
257	2021/11/18	13:23:56	41.1
258	2021/11/18	13:23:59	41.7
259	2021/11/18	13:24:02	39.9
260	2021/11/18	13:24:05	38.8
261	2021/11/18	13:24:08	39.7
262	2021/11/18	13:24:11	40.7
263	2021/11/18	13:24:14	40.7
264	2021/11/18	13:24:17	42.4
265	2021/11/18	13:24:20	41.8
266	2021/11/18	13:24:23	43.4
267	2021/11/18	13:24:26	42.6
268	2021/11/18	13:24:29	42.2
269	2021/11/18	13:24:32	42.4
270	2021/11/18	13:24:35	42.5
271	2021/11/18	13:24:38	41.0
272	2021/11/18	13:24:41	39.6
273	2021/11/18	13:24:44	40.9
274	2021/11/18	13:24:47	41.3
275	2021/11/18	13:24:50	46.0
276	2021/11/18	13:24:53	42.4
277	2021/11/18	13:24:56	43.6
278	2021/11/18	13:24:59	43.2
279	2021/11/18	13:25:02	42.4
280	2021/11/18	13:25:05	47.9
281	2021/11/18	13:25:08	41.4
282	2021/11/18	13:25:11	39.8
283	2021/11/18	13:25:14	41.5
284	2021/11/18	13:25:17	42.0
285	2021/11/18	13:25:20	42.0
286	2021/11/18	13:25:23	43.4
287	2021/11/18	13:25:26	43.2
288	2021/11/18	13:25:29	41.9
289	2021/11/18	13:25:32	41.4
290	2021/11/18	13:25:35	42.2
291	2021/11/18	13:25:38	40.0
292	2021/11/18	13:25:41	41.5
293	2021/11/18	13:25:44	42.1
294	2021/11/18	13:25:47	45.5
295	2021/11/18	13:25:50	48.1
296	2021/11/18	13:25:53	42.6
297	2021/11/18	13:25:56	41.5
298	2021/11/18	13:25:59	48.4

299	2021/11/18 13:26:02	46.1
300	2021/11/18 13:26:05	43.7

NM3

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 67.4 - 2021/11/18 13:45:00
- Level Range : 30-90
- SEL : 87.5
- Leq : 58.0
-

No.s	Date Time	(dB)
1	2021/11/18 13:31:29	56.6
2	2021/11/18 13:31:32	57.0
3	2021/11/18 13:31:35	56.9
4	2021/11/18 13:31:38	56.7
5	2021/11/18 13:31:41	56.6
6	2021/11/18 13:31:44	56.5
7	2021/11/18 13:31:47	56.9
8	2021/11/18 13:31:50	57.0
9	2021/11/18 13:31:53	57.0
10	2021/11/18 13:31:56	57.0
11	2021/11/18 13:31:59	57.3
12	2021/11/18 13:32:02	57.3
13	2021/11/18 13:32:05	57.1
14	2021/11/18 13:32:08	58.8
15	2021/11/18 13:32:11	58.3
16	2021/11/18 13:32:14	58.5
17	2021/11/18 13:32:17	59.3
18	2021/11/18 13:32:20	59.2
19	2021/11/18 13:32:23	60.3
20	2021/11/18 13:32:26	59.0
21	2021/11/18 13:32:29	58.5
22	2021/11/18 13:32:32	62.7
23	2021/11/18 13:32:35	58.9
24	2021/11/18 13:32:38	57.6
25	2021/11/18 13:32:41	56.8
26	2021/11/18 13:32:44	56.8
27	2021/11/18 13:32:47	56.7
28	2021/11/18 13:32:50	56.5
29	2021/11/18 13:32:53	56.6
30	2021/11/18 13:32:56	56.6
31	2021/11/18 13:32:59	56.6
32	2021/11/18 13:33:02	56.5
33	2021/11/18 13:33:05	56.7
34	2021/11/18 13:33:08	56.7
35	2021/11/18 13:33:11	56.6
36	2021/11/18 13:33:14	56.8
37	2021/11/18 13:33:17	56.5
38	2021/11/18 13:33:20	56.6
39	2021/11/18 13:33:23	56.7
40	2021/11/18 13:33:26	56.7
41	2021/11/18 13:33:29	56.8
42	2021/11/18 13:33:32	56.8
43	2021/11/18 13:33:35	56.7
44	2021/11/18 13:33:38	56.5
45	2021/11/18 13:33:41	56.5
46	2021/11/18 13:33:44	56.5
47	2021/11/18 13:33:47	56.5
48	2021/11/18 13:33:50	56.6
49	2021/11/18 13:33:53	56.6
50	2021/11/18 13:33:56	56.6
51	2021/11/18 13:33:59	56.5
52	2021/11/18 13:34:02	56.6
53	2021/11/18 13:34:05	56.8
54	2021/11/18 13:34:08	56.6
55	2021/11/18 13:34:11	56.7
56	2021/11/18 13:34:14	57.0
57	2021/11/18 13:34:17	56.6
58	2021/11/18 13:34:20	56.7
59	2021/11/18 13:34:23	56.8
60	2021/11/18 13:34:26	57.1
61	2021/11/18 13:34:29	56.7
62	2021/11/18 13:34:32	57.1
63	2021/11/18 13:34:35	57.1
64	2021/11/18 13:34:38	56.8
65	2021/11/18 13:34:41	57.0
66	2021/11/18 13:34:44	56.6
67	2021/11/18 13:34:47	56.8
68	2021/11/18 13:34:50	56.8
69	2021/11/18 13:34:53	56.9
70	2021/11/18 13:34:56	56.8
71	2021/11/18 13:34:59	56.8
72	2021/11/18 13:35:02	57.0
73	2021/11/18 13:35:05	56.7
74	2021/11/18 13:35:08	56.3
75	2021/11/18 13:35:11	56.3
76	2021/11/18 13:35:14	56.3
77	2021/11/18 13:35:17	57.0
78	2021/11/18 13:35:20	56.5
79	2021/11/18 13:35:23	56.8
80	2021/11/18 13:35:26	57.2
81	2021/11/18 13:35:29	56.8
82	2021/11/18 13:35:32	57.0
83	2021/11/18 13:35:35	56.8
84	2021/11/18 13:35:38	56.6
85	2021/11/18 13:35:41	56.6
86	2021/11/18 13:35:44	57.5
87	2021/11/18 13:35:47	58.4
88	2021/11/18 13:35:50	57.8
89	2021/11/18 13:35:53	56.9
90	2021/11/18 13:35:56	56.6

91	2021/11/18	13:35:59	56.4
92	2021/11/18	13:36:02	56.8
93	2021/11/18	13:36:05	56.5
94	2021/11/18	13:36:08	56.6
95	2021/11/18	13:36:11	57.5
96	2021/11/18	13:36:14	64.6
97	2021/11/18	13:36:17	58.9
98	2021/11/18	13:36:20	59.0
99	2021/11/18	13:36:23	62.8
100	2021/11/18	13:36:26	58.8
101	2021/11/18	13:36:29	58.0
102	2021/11/18	13:36:32	65.7
103	2021/11/18	13:36:35	59.9
104	2021/11/18	13:36:38	57.9
105	2021/11/18	13:36:41	57.0
106	2021/11/18	13:36:44	56.8
107	2021/11/18	13:36:47	57.9
108	2021/11/18	13:36:50	63.9
109	2021/11/18	13:36:53	59.7
110	2021/11/18	13:36:56	58.4
111	2021/11/18	13:36:59	58.7
112	2021/11/18	13:37:02	62.1
113	2021/11/18	13:37:05	58.4
114	2021/11/18	13:37:08	57.3
115	2021/11/18	13:37:11	57.2
116	2021/11/18	13:37:14	57.7
117	2021/11/18	13:37:17	58.9
118	2021/11/18	13:37:20	65.7
119	2021/11/18	13:37:23	65.8
120	2021/11/18	13:37:26	60.1
121	2021/11/18	13:37:29	58.2
122	2021/11/18	13:37:32	58.1
123	2021/11/18	13:37:35	57.6
124	2021/11/18	13:37:38	57.3
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126	2021/11/18	13:37:44	57.2
127	2021/11/18	13:37:47	57.4
128	2021/11/18	13:37:50	57.4
129	2021/11/18	13:37:53	57.5
130	2021/11/18	13:37:56	57.5
131	2021/11/18	13:37:59	57.5
132	2021/11/18	13:38:02	57.6
133	2021/11/18	13:38:05	57.5
134	2021/11/18	13:38:08	57.4
135	2021/11/18	13:38:11	57.4
136	2021/11/18	13:38:14	57.4
137	2021/11/18	13:38:17	57.8
138	2021/11/18	13:38:20	58.2
139	2021/11/18	13:38:23	58.5
140	2021/11/18	13:38:26	58.4
141	2021/11/18	13:38:29	57.5
142	2021/11/18	13:38:32	57.4
143	2021/11/18	13:38:35	57.7
144	2021/11/18	13:38:38	57.6
145	2021/11/18	13:38:41	57.4
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147	2021/11/18	13:38:47	57.4
148	2021/11/18	13:38:50	57.4
149	2021/11/18	13:38:53	57.4
150	2021/11/18	13:38:56	57.4
151	2021/11/18	13:38:59	57.2
152	2021/11/18	13:39:02	57.2
153	2021/11/18	13:39:05	57.3
154	2021/11/18	13:39:08	57.1
155	2021/11/18	13:39:11	57.2
156	2021/11/18	13:39:14	57.2
157	2021/11/18	13:39:17	57.3
158	2021/11/18	13:39:20	57.3
159	2021/11/18	13:39:23	57.4
160	2021/11/18	13:39:26	57.4
161	2021/11/18	13:39:29	57.4
162	2021/11/18	13:39:32	57.4
163	2021/11/18	13:39:35	57.5
164	2021/11/18	13:39:38	57.2
165	2021/11/18	13:39:41	57.3
166	2021/11/18	13:39:44	57.2
167	2021/11/18	13:39:47	57.4
168	2021/11/18	13:39:50	57.5
169	2021/11/18	13:39:53	57.4
170	2021/11/18	13:39:56	57.5
171	2021/11/18	13:39:59	57.5
172	2021/11/18	13:40:02	57.5
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174	2021/11/18	13:40:08	57.4
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176	2021/11/18	13:40:14	57.4
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178	2021/11/18	13:40:20	57.5
179	2021/11/18	13:40:23	57.5
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181	2021/11/18	13:40:29	57.5
182	2021/11/18	13:40:32	57.5
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184	2021/11/18	13:40:38	57.4
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188	2021/11/18	13:40:50	57.5
189	2021/11/18	13:40:53	57.5
190	2021/11/18	13:40:56	59.7
191	2021/11/18	13:40:59	59.6
192	2021/11/18	13:41:02	58.2
193	2021/11/18	13:41:05	57.6
194	2021/11/18	13:41:08	57.4

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200	2021/11/18	13:41:26	57.5
201	2021/11/18	13:41:29	57.1
202	2021/11/18	13:41:32	57.1
203	2021/11/18	13:41:35	57.2
204	2021/11/18	13:41:38	57.0
205	2021/11/18	13:41:41	57.0
206	2021/11/18	13:41:44	57.0
207	2021/11/18	13:41:47	57.1
208	2021/11/18	13:41:50	57.1
209	2021/11/18	13:41:53	57.3
210	2021/11/18	13:41:56	57.5
211	2021/11/18	13:41:59	57.4
212	2021/11/18	13:42:02	57.3
213	2021/11/18	13:42:05	57.9
214	2021/11/18	13:42:08	61.2
215	2021/11/18	13:42:11	61.1
216	2021/11/18	13:42:14	58.0
217	2021/11/18	13:42:17	58.0
218	2021/11/18	13:42:20	57.2
219	2021/11/18	13:42:23	57.2
220	2021/11/18	13:42:26	57.2
221	2021/11/18	13:42:29	56.9
222	2021/11/18	13:42:32	57.0
223	2021/11/18	13:42:35	57.3
224	2021/11/18	13:42:38	56.6
225	2021/11/18	13:42:41	56.9
226	2021/11/18	13:42:44	56.9
227	2021/11/18	13:42:47	56.9
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230	2021/11/18	13:42:56	57.0
231	2021/11/18	13:42:59	57.2
232	2021/11/18	13:43:02	57.1
233	2021/11/18	13:43:05	57.2
234	2021/11/18	13:43:08	56.8
235	2021/11/18	13:43:11	57.1
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237	2021/11/18	13:43:17	57.1
238	2021/11/18	13:43:20	56.9
239	2021/11/18	13:43:23	57.0
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242	2021/11/18	13:43:32	57.1
243	2021/11/18	13:43:35	57.2
244	2021/11/18	13:43:38	57.0
245	2021/11/18	13:43:41	56.9
246	2021/11/18	13:43:44	57.0
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248	2021/11/18	13:43:50	57.1
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250	2021/11/18	13:43:56	57.2
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255	2021/11/18	13:44:11	57.0
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260	2021/11/18	13:44:26	57.2
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262	2021/11/18	13:44:32	57.1
263	2021/11/18	13:44:35	57.3
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266	2021/11/18	13:44:44	57.9
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268	2021/11/18	13:44:50	58.8
269	2021/11/18	13:44:53	58.6
270	2021/11/18	13:44:56	61.0
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272	2021/11/18	13:45:02	60.5
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283	2021/11/18	13:45:35	57.3
284	2021/11/18	13:45:38	56.9
285	2021/11/18	13:45:41	57.2
286	2021/11/18	13:45:44	57.1
287	2021/11/18	13:45:47	57.2
288	2021/11/18	13:45:50	57.3
289	2021/11/18	13:45:53	57.6
290	2021/11/18	13:45:56	57.9
291	2021/11/18	13:45:59	57.4
292	2021/11/18	13:46:02	57.3
293	2021/11/18	13:46:05	57.4
294	2021/11/18	13:46:08	57.1
295	2021/11/18	13:46:11	57.3
296	2021/11/18	13:46:14	57.1
297	2021/11/18	13:46:17	57.2
298	2021/11/18	13:46:20	57.2

299	2021/11/18 13:46:23	57.5
300	2021/11/18 13:46:26	59.7

NM4

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 64.2 - 2021/11/18 14:01:38
- Level Range : 30-90
- SEL : 78.3
- Leq : 48.8
-

No.s	Date Time	(dB)
1	2021/11/18 13:58:46	47.5
2	2021/11/18 13:58:49	48.7
3	2021/11/18 13:58:52	46.7
4	2021/11/18 13:58:55	45.9
5	2021/11/18 13:58:58	46.6
6	2021/11/18 13:59:01	44.4
7	2021/11/18 13:59:04	44.2
8	2021/11/18 13:59:07	43.9
9	2021/11/18 13:59:10	45.4
10	2021/11/18 13:59:13	53.0
11	2021/11/18 13:59:16	47.1
12	2021/11/18 13:59:19	46.1
13	2021/11/18 13:59:22	45.9
14	2021/11/18 13:59:25	47.5
15	2021/11/18 13:59:28	50.1
16	2021/11/18 13:59:31	49.7
17	2021/11/18 13:59:34	47.7
18	2021/11/18 13:59:37	47.3
19	2021/11/18 13:59:40	45.3
20	2021/11/18 13:59:43	44.9
21	2021/11/18 13:59:46	44.9
22	2021/11/18 13:59:49	43.9
23	2021/11/18 13:59:52	45.2
24	2021/11/18 13:59:55	46.6
25	2021/11/18 13:59:58	47.0
26	2021/11/18 14:00:01	45.8
27	2021/11/18 14:00:04	46.2
28	2021/11/18 14:00:07	46.3
29	2021/11/18 14:00:10	48.1
30	2021/11/18 14:00:13	46.1
31	2021/11/18 14:00:16	44.7
32	2021/11/18 14:00:19	44.1
33	2021/11/18 14:00:22	44.6
34	2021/11/18 14:00:25	46.4
35	2021/11/18 14:00:28	44.8
36	2021/11/18 14:00:31	51.4
37	2021/11/18 14:00:34	50.8
38	2021/11/18 14:00:37	51.2
39	2021/11/18 14:00:40	45.4
40	2021/11/18 14:00:43	48.2
41	2021/11/18 14:00:46	46.6
42	2021/11/18 14:00:49	50.5
43	2021/11/18 14:00:52	47.7
44	2021/11/18 14:00:55	49.7
45	2021/11/18 14:00:58	49.8
46	2021/11/18 14:01:01	45.6
47	2021/11/18 14:01:04	45.1
48	2021/11/18 14:01:07	47.7
49	2021/11/18 14:01:10	45.3
50	2021/11/18 14:01:13	46.2
51	2021/11/18 14:01:16	46.6
52	2021/11/18 14:01:19	48.8
53	2021/11/18 14:01:22	50.4
54	2021/11/18 14:01:25	59.6
55	2021/11/18 14:01:28	50.8
56	2021/11/18 14:01:31	47.9
57	2021/11/18 14:01:34	48.4
58	2021/11/18 14:01:37	62.7
59	2021/11/18 14:01:40	58.4
60	2021/11/18 14:01:43	48.2
61	2021/11/18 14:01:46	45.2
62	2021/11/18 14:01:49	44.5
63	2021/11/18 14:01:52	42.9
64	2021/11/18 14:01:55	43.6
65	2021/11/18 14:01:58	42.8
66	2021/11/18 14:02:01	44.9
67	2021/11/18 14:02:04	43.6
68	2021/11/18 14:02:07	45.3
69	2021/11/18 14:02:10	43.3
70	2021/11/18 14:02:13	42.4
71	2021/11/18 14:02:16	42.5
72	2021/11/18 14:02:19	44.1
73	2021/11/18 14:02:22	42.9
74	2021/11/18 14:02:25	42.8
75	2021/11/18 14:02:28	42.1
76	2021/11/18 14:02:31	42.4
77	2021/11/18 14:02:34	42.4
78	2021/11/18 14:02:37	42.5
79	2021/11/18 14:02:40	42.2
80	2021/11/18 14:02:43	42.3
81	2021/11/18 14:02:46	43.0
82	2021/11/18 14:02:49	43.0
83	2021/11/18 14:02:52	43.6
84	2021/11/18 14:02:55	44.5
85	2021/11/18 14:02:58	48.7
86	2021/11/18 14:03:01	45.9
87	2021/11/18 14:03:04	42.6
88	2021/11/18 14:03:07	41.5
89	2021/11/18 14:03:10	42.2
90	2021/11/18 14:03:13	42.4

91	2021/11/18	14:03:16	41.5
92	2021/11/18	14:03:19	41.4
93	2021/11/18	14:03:22	42.2
94	2021/11/18	14:03:25	43.3
95	2021/11/18	14:03:28	44.6
96	2021/11/18	14:03:31	47.1
97	2021/11/18	14:03:34	48.4
98	2021/11/18	14:03:37	45.7
99	2021/11/18	14:03:40	45.4
100	2021/11/18	14:03:43	43.8
101	2021/11/18	14:03:46	44.0
102	2021/11/18	14:03:49	43.9
103	2021/11/18	14:03:52	45.1
104	2021/11/18	14:03:55	45.5
105	2021/11/18	14:03:58	46.3
106	2021/11/18	14:04:01	45.8
107	2021/11/18	14:04:04	47.9
108	2021/11/18	14:04:07	47.5
109	2021/11/18	14:04:10	47.4
110	2021/11/18	14:04:13	46.0
111	2021/11/18	14:04:16	45.1
112	2021/11/18	14:04:19	47.1
113	2021/11/18	14:04:22	47.2
114	2021/11/18	14:04:25	49.9
115	2021/11/18	14:04:28	48.0
116	2021/11/18	14:04:31	47.1
117	2021/11/18	14:04:34	48.4
118	2021/11/18	14:04:37	46.3
119	2021/11/18	14:04:40	45.7
120	2021/11/18	14:04:43	46.5
121	2021/11/18	14:04:46	45.4
122	2021/11/18	14:04:49	44.4
123	2021/11/18	14:04:52	46.1
124	2021/11/18	14:04:55	47.8
125	2021/11/18	14:04:58	47.1
126	2021/11/18	14:05:01	46.9
127	2021/11/18	14:05:04	47.2
128	2021/11/18	14:05:07	47.7
129	2021/11/18	14:05:10	46.4
130	2021/11/18	14:05:13	43.6
131	2021/11/18	14:05:16	42.4
132	2021/11/18	14:05:19	42.3
133	2021/11/18	14:05:22	43.1
134	2021/11/18	14:05:25	43.0
135	2021/11/18	14:05:28	42.7
136	2021/11/18	14:05:31	42.8
137	2021/11/18	14:05:34	43.7
138	2021/11/18	14:05:37	43.6
139	2021/11/18	14:05:40	43.6
140	2021/11/18	14:05:43	43.0
141	2021/11/18	14:05:46	42.7
142	2021/11/18	14:05:49	44.4
143	2021/11/18	14:05:52	44.4
144	2021/11/18	14:05:55	44.7
145	2021/11/18	14:05:58	48.2
146	2021/11/18	14:06:01	47.5
147	2021/11/18	14:06:04	46.4
148	2021/11/18	14:06:07	44.7
149	2021/11/18	14:06:10	43.4
150	2021/11/18	14:06:13	42.2
151	2021/11/18	14:06:16	43.2
152	2021/11/18	14:06:19	42.2
153	2021/11/18	14:06:22	42.7
154	2021/11/18	14:06:25	43.6
155	2021/11/18	14:06:28	43.9
156	2021/11/18	14:06:31	43.6
157	2021/11/18	14:06:34	45.8
158	2021/11/18	14:06:37	45.6
159	2021/11/18	14:06:40	45.0
160	2021/11/18	14:06:43	44.4
161	2021/11/18	14:06:46	44.0
162	2021/11/18	14:06:49	44.4
163	2021/11/18	14:06:52	44.4
164	2021/11/18	14:06:55	44.3
165	2021/11/18	14:06:58	44.2
166	2021/11/18	14:07:01	44.6
167	2021/11/18	14:07:04	45.7
168	2021/11/18	14:07:07	47.4
169	2021/11/18	14:07:10	49.1
170	2021/11/18	14:07:13	49.5
171	2021/11/18	14:07:16	49.4
172	2021/11/18	14:07:19	52.7
173	2021/11/18	14:07:22	48.9
174	2021/11/18	14:07:25	48.6
175	2021/11/18	14:07:28	49.9
176	2021/11/18	14:07:31	49.0
177	2021/11/18	14:07:34	48.8
178	2021/11/18	14:07:37	47.2
179	2021/11/18	14:07:40	46.8
180	2021/11/18	14:07:43	47.6
181	2021/11/18	14:07:46	45.2
182	2021/11/18	14:07:49	46.7
183	2021/11/18	14:07:52	45.4
184	2021/11/18	14:07:55	45.5
185	2021/11/18	14:07:58	44.2
186	2021/11/18	14:08:01	45.0
187	2021/11/18	14:08:04	43.8
188	2021/11/18	14:08:07	46.3
189	2021/11/18	14:08:10	45.9
190	2021/11/18	14:08:13	44.9
191	2021/11/18	14:08:16	44.3
192	2021/11/18	14:08:19	48.2
193	2021/11/18	14:08:22	51.4
194	2021/11/18	14:08:25	47.6

195	2021/11/18	14:08:28	44.6
196	2021/11/18	14:08:31	46.4
197	2021/11/18	14:08:34	49.5
198	2021/11/18	14:08:37	49.7
199	2021/11/18	14:08:40	46.7
200	2021/11/18	14:08:43	44.6
201	2021/11/18	14:08:46	45.3
202	2021/11/18	14:08:49	44.2
203	2021/11/18	14:08:52	43.1
204	2021/11/18	14:08:55	43.2
205	2021/11/18	14:08:58	45.1
206	2021/11/18	14:09:01	45.2
207	2021/11/18	14:09:04	45.8
208	2021/11/18	14:09:07	45.2
209	2021/11/18	14:09:10	44.2
210	2021/11/18	14:09:13	44.0
211	2021/11/18	14:09:16	42.7
212	2021/11/18	14:09:19	43.8
213	2021/11/18	14:09:22	45.3
214	2021/11/18	14:09:25	47.3
215	2021/11/18	14:09:28	45.8
216	2021/11/18	14:09:31	45.1
217	2021/11/18	14:09:34	46.4
218	2021/11/18	14:09:37	47.4
219	2021/11/18	14:09:40	47.9
220	2021/11/18	14:09:43	47.8
221	2021/11/18	14:09:46	46.8
222	2021/11/18	14:09:49	46.6
223	2021/11/18	14:09:52	45.7
224	2021/11/18	14:09:55	46.8
225	2021/11/18	14:09:58	47.2
226	2021/11/18	14:10:01	48.0
227	2021/11/18	14:10:04	49.4
228	2021/11/18	14:10:07	48.0
229	2021/11/18	14:10:10	47.5
230	2021/11/18	14:10:13	48.1
231	2021/11/18	14:10:16	47.7
232	2021/11/18	14:10:19	47.3
233	2021/11/18	14:10:22	47.4
234	2021/11/18	14:10:25	46.3
235	2021/11/18	14:10:28	46.8
236	2021/11/18	14:10:31	44.7
237	2021/11/18	14:10:34	45.3
238	2021/11/18	14:10:37	45.3
239	2021/11/18	14:10:40	44.2
240	2021/11/18	14:10:43	44.0
241	2021/11/18	14:10:46	44.1
242	2021/11/18	14:10:49	43.2
243	2021/11/18	14:10:52	43.1
244	2021/11/18	14:10:55	43.4
245	2021/11/18	14:10:58	45.7
246	2021/11/18	14:11:01	45.9
247	2021/11/18	14:11:04	52.5
248	2021/11/18	14:11:07	50.8
249	2021/11/18	14:11:10	54.1
250	2021/11/18	14:11:13	51.9
251	2021/11/18	14:11:16	52.7
252	2021/11/18	14:11:19	54.3
253	2021/11/18	14:11:22	54.3
254	2021/11/18	14:11:25	54.7
255	2021/11/18	14:11:28	63.2
256	2021/11/18	14:11:31	54.7
257	2021/11/18	14:11:34	49.4
258	2021/11/18	14:11:37	50.2
259	2021/11/18	14:11:40	48.8
260	2021/11/18	14:11:43	49.3
261	2021/11/18	14:11:46	51.2
262	2021/11/18	14:11:49	53.2
263	2021/11/18	14:11:52	47.1
264	2021/11/18	14:11:55	47.1
265	2021/11/18	14:11:58	46.6
266	2021/11/18	14:12:01	54.3
267	2021/11/18	14:12:04	54.0
268	2021/11/18	14:12:07	54.8
269	2021/11/18	14:12:10	54.2
270	2021/11/18	14:12:13	51.3
271	2021/11/18	14:12:16	49.7
272	2021/11/18	14:12:19	48.1
273	2021/11/18	14:12:22	47.8
274	2021/11/18	14:12:25	51.4
275	2021/11/18	14:12:28	51.9
276	2021/11/18	14:12:31	50.7
277	2021/11/18	14:12:34	53.7
278	2021/11/18	14:12:37	47.4
279	2021/11/18	14:12:40	54.5
280	2021/11/18	14:12:43	53.5
281	2021/11/18	14:12:46	56.4
282	2021/11/18	14:12:49	52.6
283	2021/11/18	14:12:52	53.1
284	2021/11/18	14:12:55	49.4
285	2021/11/18	14:12:58	47.7
286	2021/11/18	14:13:01	51.2
287	2021/11/18	14:13:04	51.8
288	2021/11/18	14:13:07	48.8
289	2021/11/18	14:13:10	47.6
290	2021/11/18	14:13:13	44.2
291	2021/11/18	14:13:16	42.3
292	2021/11/18	14:13:19	44.3
293	2021/11/18	14:13:22	43.5
294	2021/11/18	14:13:25	41.5
295	2021/11/18	14:13:28	42.0
296	2021/11/18	14:13:31	42.2
297	2021/11/18	14:13:34	42.6
298	2021/11/18	14:13:37	43.0

299	2021/11/18	14:13:40	45.8
300	2021/11/18	14:13:43	44.8

NM5

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 87.0 - 2021/11/18 14:27:50
- Level Range : 30-90
- SEL : 99.5
- Leq : 70.0
-

No.s	Date Time	(dB)
1	2021/11/18 14:22:16	71.5
2	2021/11/18 14:22:19	62.0
3	2021/11/18 14:22:22	68.0
4	2021/11/18 14:22:25	68.1
5	2021/11/18 14:22:28	64.1
6	2021/11/18 14:22:31	62.7
7	2021/11/18 14:22:34	54.3
8	2021/11/18 14:22:37	52.2
9	2021/11/18 14:22:40	56.9
10	2021/11/18 14:22:43	61.9
11	2021/11/18 14:22:46	60.9
12	2021/11/18 14:22:49	58.7
13	2021/11/18 14:22:52	57.0
14	2021/11/18 14:22:55	59.1
15	2021/11/18 14:22:58	69.4
16	2021/11/18 14:23:01	67.5
17	2021/11/18 14:23:04	69.0
18	2021/11/18 14:23:07	70.2
19	2021/11/18 14:23:10	72.4
20	2021/11/18 14:23:13	71.4
21	2021/11/18 14:23:16	63.4
22	2021/11/18 14:23:19	67.2
23	2021/11/18 14:23:22	68.1
24	2021/11/18 14:23:25	70.6
25	2021/11/18 14:23:28	71.1
26	2021/11/18 14:23:31	69.1
27	2021/11/18 14:23:34	72.6
28	2021/11/18 14:23:37	72.7
29	2021/11/18 14:23:40	72.7
30	2021/11/18 14:23:43	72.6
31	2021/11/18 14:23:46	73.5
32	2021/11/18 14:23:49	70.3
33	2021/11/18 14:23:52	72.2
34	2021/11/18 14:23:55	73.9
35	2021/11/18 14:23:58	69.8
36	2021/11/18 14:24:01	73.4
37	2021/11/18 14:24:04	74.4
38	2021/11/18 14:24:07	68.8
39	2021/11/18 14:24:10	69.8
40	2021/11/18 14:24:13	70.0
41	2021/11/18 14:24:16	68.3
42	2021/11/18 14:24:19	65.2
43	2021/11/18 14:24:22	63.4
44	2021/11/18 14:24:25	59.1
45	2021/11/18 14:24:28	60.9
46	2021/11/18 14:24:31	66.5
47	2021/11/18 14:24:34	58.7
48	2021/11/18 14:24:37	54.7
49	2021/11/18 14:24:40	55.8
50	2021/11/18 14:24:43	60.7
51	2021/11/18 14:24:46	68.6
52	2021/11/18 14:24:49	59.7
53	2021/11/18 14:24:52	52.3
54	2021/11/18 14:24:55	51.6
55	2021/11/18 14:24:58	55.2
56	2021/11/18 14:25:01	58.5
57	2021/11/18 14:25:04	68.1
58	2021/11/18 14:25:07	72.4
59	2021/11/18 14:25:10	70.5
60	2021/11/18 14:25:13	70.4
61	2021/11/18 14:25:16	68.0
62	2021/11/18 14:25:19	59.9
63	2021/11/18 14:25:22	61.8
64	2021/11/18 14:25:25	71.2
65	2021/11/18 14:25:28	66.1
66	2021/11/18 14:25:31	66.7
67	2021/11/18 14:25:34	65.9
68	2021/11/18 14:25:37	70.7
69	2021/11/18 14:25:40	64.0
70	2021/11/18 14:25:43	69.0
71	2021/11/18 14:25:46	68.7
72	2021/11/18 14:25:49	68.5
73	2021/11/18 14:25:52	71.4
74	2021/11/18 14:25:55	72.3
75	2021/11/18 14:25:58	70.0
76	2021/11/18 14:26:01	69.2
77	2021/11/18 14:26:04	71.7
78	2021/11/18 14:26:07	69.5
79	2021/11/18 14:26:10	68.3
80	2021/11/18 14:26:13	67.1
81	2021/11/18 14:26:16	69.1
82	2021/11/18 14:26:19	68.2
83	2021/11/18 14:26:22	67.4
84	2021/11/18 14:26:25	68.8
85	2021/11/18 14:26:28	68.3
86	2021/11/18 14:26:31	63.6
87	2021/11/18 14:26:34	64.3
88	2021/11/18 14:26:37	66.0
89	2021/11/18 14:26:40	58.0
90	2021/11/18 14:26:43	52.4

91	2021/11/18	14:26:46	48.9
92	2021/11/18	14:26:49	60.1
93	2021/11/18	14:26:52	73.0
94	2021/11/18	14:26:55	65.0
95	2021/11/18	14:26:58	56.6
96	2021/11/18	14:27:01	65.3
97	2021/11/18	14:27:04	58.5
98	2021/11/18	14:27:07	61.4
99	2021/11/18	14:27:10	68.3
100	2021/11/18	14:27:13	75.8
101	2021/11/18	14:27:16	70.2
102	2021/11/18	14:27:19	68.2
103	2021/11/18	14:27:22	70.3
104	2021/11/18	14:27:25	70.1
105	2021/11/18	14:27:28	71.2
106	2021/11/18	14:27:31	68.9
107	2021/11/18	14:27:34	68.9
108	2021/11/18	14:27:37	72.5
109	2021/11/18	14:27:40	65.2
110	2021/11/18	14:27:43	72.7
111	2021/11/18	14:27:46	81.6
112	2021/11/18	14:27:49	84.5*
113	2021/11/18	14:27:52	77.4*
114	2021/11/18	14:27:55	73.8
115	2021/11/18	14:27:58	70.3
116	2021/11/18	14:28:01	68.2
117	2021/11/18	14:28:04	71.9
118	2021/11/18	14:28:07	68.4
119	2021/11/18	14:28:10	68.0
120	2021/11/18	14:28:13	68.3
121	2021/11/18	14:28:16	63.2
122	2021/11/18	14:28:19	66.3
123	2021/11/18	14:28:22	73.8
124	2021/11/18	14:28:25	69.6
125	2021/11/18	14:28:28	69.1
126	2021/11/18	14:28:31	68.1
127	2021/11/18	14:28:34	68.2
128	2021/11/18	14:28:37	66.1
129	2021/11/18	14:28:40	64.7
130	2021/11/18	14:28:43	68.6
131	2021/11/18	14:28:46	70.7
132	2021/11/18	14:28:49	69.8
133	2021/11/18	14:28:52	62.8
134	2021/11/18	14:28:55	63.1
135	2021/11/18	14:28:58	59.6
136	2021/11/18	14:29:01	64.1
137	2021/11/18	14:29:04	65.7
138	2021/11/18	14:29:07	62.5
139	2021/11/18	14:29:10	61.0
140	2021/11/18	14:29:13	60.4
141	2021/11/18	14:29:16	57.9
142	2021/11/18	14:29:19	59.9
143	2021/11/18	14:29:22	55.7
144	2021/11/18	14:29:25	60.3
145	2021/11/18	14:29:28	62.5
146	2021/11/18	14:29:31	61.7
147	2021/11/18	14:29:34	58.6
148	2021/11/18	14:29:37	62.0
149	2021/11/18	14:29:40	65.8
150	2021/11/18	14:29:43	73.3
151	2021/11/18	14:29:46	70.7
152	2021/11/18	14:29:49	69.7
153	2021/11/18	14:29:52	69.7
154	2021/11/18	14:29:55	68.2
155	2021/11/18	14:29:58	67.6
156	2021/11/18	14:30:01	69.8
157	2021/11/18	14:30:04	69.7
158	2021/11/18	14:30:07	69.1
159	2021/11/18	14:30:10	68.0
160	2021/11/18	14:30:13	66.5
161	2021/11/18	14:30:16	66.0
162	2021/11/18	14:30:19	62.4
163	2021/11/18	14:30:22	59.8
164	2021/11/18	14:30:25	59.3
165	2021/11/18	14:30:28	60.8
166	2021/11/18	14:30:31	61.7
167	2021/11/18	14:30:34	64.9
168	2021/11/18	14:30:37	66.9
169	2021/11/18	14:30:40	62.8
170	2021/11/18	14:30:43	63.0
171	2021/11/18	14:30:46	63.3
172	2021/11/18	14:30:49	57.7
173	2021/11/18	14:30:52	52.1
174	2021/11/18	14:30:55	52.3
175	2021/11/18	14:30:58	52.8
176	2021/11/18	14:31:01	55.0
177	2021/11/18	14:31:04	58.9
178	2021/11/18	14:31:07	51.7
179	2021/11/18	14:31:10	50.7
180	2021/11/18	14:31:13	50.5
181	2021/11/18	14:31:16	49.8
182	2021/11/18	14:31:19	49.8
183	2021/11/18	14:31:22	49.0
184	2021/11/18	14:31:25	51.1
185	2021/11/18	14:31:28	50.7
186	2021/11/18	14:31:31	51.5
187	2021/11/18	14:31:34	55.6
188	2021/11/18	14:31:37	62.9
189	2021/11/18	14:31:40	59.7
190	2021/11/18	14:31:43	58.8
191	2021/11/18	14:31:46	69.0
192	2021/11/18	14:31:49	69.4
193	2021/11/18	14:31:52	66.4
194	2021/11/18	14:31:55	71.0

195	2021/11/18	14:31:58	72.6
196	2021/11/18	14:32:01	70.6
197	2021/11/18	14:32:04	69.2
198	2021/11/18	14:32:07	64.7
199	2021/11/18	14:32:10	66.0
200	2021/11/18	14:32:13	67.5
201	2021/11/18	14:32:16	66.3
202	2021/11/18	14:32:19	68.6
203	2021/11/18	14:32:22	65.8
204	2021/11/18	14:32:25	69.8
205	2021/11/18	14:32:28	69.3
206	2021/11/18	14:32:31	69.0
207	2021/11/18	14:32:34	70.8
208	2021/11/18	14:32:37	68.7
209	2021/11/18	14:32:40	70.3
210	2021/11/18	14:32:43	71.0
211	2021/11/18	14:32:46	69.6
212	2021/11/18	14:32:49	66.7
213	2021/11/18	14:32:52	69.1
214	2021/11/18	14:32:55	70.3
215	2021/11/18	14:32:58	71.9
216	2021/11/18	14:33:01	69.8
217	2021/11/18	14:33:04	66.4
218	2021/11/18	14:33:07	63.3
219	2021/11/18	14:33:10	63.7
220	2021/11/18	14:33:13	57.8
221	2021/11/18	14:33:16	56.8
222	2021/11/18	14:33:19	58.0
223	2021/11/18	14:33:22	53.7
224	2021/11/18	14:33:25	52.0
225	2021/11/18	14:33:28	52.6
226	2021/11/18	14:33:31	51.7
227	2021/11/18	14:33:34	54.4
228	2021/11/18	14:33:37	58.1
229	2021/11/18	14:33:40	58.7
230	2021/11/18	14:33:43	68.5
231	2021/11/18	14:33:46	64.9
232	2021/11/18	14:33:49	63.1
233	2021/11/18	14:33:52	62.3
234	2021/11/18	14:33:55	61.6
235	2021/11/18	14:33:58	60.5
236	2021/11/18	14:34:01	60.1
237	2021/11/18	14:34:04	66.0
238	2021/11/18	14:34:07	71.9
239	2021/11/18	14:34:10	72.5
240	2021/11/18	14:34:13	71.4
241	2021/11/18	14:34:16	71.8
242	2021/11/18	14:34:19	70.9
243	2021/11/18	14:34:22	70.5
244	2021/11/18	14:34:25	69.4
245	2021/11/18	14:34:28	71.0
246	2021/11/18	14:34:31	70.9
247	2021/11/18	14:34:34	69.5
248	2021/11/18	14:34:37	72.9
249	2021/11/18	14:34:40	70.8
250	2021/11/18	14:34:43	70.6
251	2021/11/18	14:34:46	67.2
252	2021/11/18	14:34:49	71.0
253	2021/11/18	14:34:52	73.0
254	2021/11/18	14:34:55	68.1
255	2021/11/18	14:34:58	63.4
256	2021/11/18	14:35:01	73.3
257	2021/11/18	14:35:04	64.8
258	2021/11/18	14:35:07	66.8
259	2021/11/18	14:35:10	66.3
260	2021/11/18	14:35:13	67.8
261	2021/11/18	14:35:16	69.2
262	2021/11/18	14:35:19	61.9
263	2021/11/18	14:35:22	60.6
264	2021/11/18	14:35:25	64.4
265	2021/11/18	14:35:28	60.5
266	2021/11/18	14:35:31	59.1
267	2021/11/18	14:35:34	63.8
268	2021/11/18	14:35:37	65.1
269	2021/11/18	14:35:40	61.5
270	2021/11/18	14:35:43	66.3
271	2021/11/18	14:35:46	57.8
272	2021/11/18	14:35:49	52.5
273	2021/11/18	14:35:52	50.3
274	2021/11/18	14:35:55	57.6
275	2021/11/18	14:35:58	63.3
276	2021/11/18	14:36:01	61.3
277	2021/11/18	14:36:04	70.7
278	2021/11/18	14:36:07	73.8
279	2021/11/18	14:36:10	79.9
280	2021/11/18	14:36:13	75.1
281	2021/11/18	14:36:16	74.1
282	2021/11/18	14:36:19	72.1
283	2021/11/18	14:36:22	71.2
284	2021/11/18	14:36:25	69.1
285	2021/11/18	14:36:28	70.5
286	2021/11/18	14:36:31	74.1
287	2021/11/18	14:36:34	71.5
288	2021/11/18	14:36:37	71.9
289	2021/11/18	14:36:40	74.0
290	2021/11/18	14:36:43	74.0
291	2021/11/18	14:36:46	72.9
292	2021/11/18	14:36:49	69.8
293	2021/11/18	14:36:52	70.3
294	2021/11/18	14:36:55	70.5
295	2021/11/18	14:36:58	74.8
296	2021/11/18	14:37:01	73.5
297	2021/11/18	14:37:04	69.5
298	2021/11/18	14:37:07	69.1

299	2021/11/18	14:37:10	68.7
300	2021/11/18	14:37:13	63.1
301	2021/11/18	14:37:16	61.4
302	2021/11/18	14:37:19	63.9

NM6

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 65.9 - 2021/11/18 15:10:30
- Level Range : 30-90
- SEL : 76.4
- Leq : 46.9
-

No.s	Date Time	(dB)
1	2021/11/18 14:58:46	51.6
2	2021/11/18 14:58:49	50.2
3	2021/11/18 14:58:52	44.9
4	2021/11/18 14:58:55	42.5
5	2021/11/18 14:58:58	42.3
6	2021/11/18 14:59:01	43.1
7	2021/11/18 14:59:04	42.8
8	2021/11/18 14:59:07	42.1
9	2021/11/18 14:59:10	42.5
10	2021/11/18 14:59:13	42.6
11	2021/11/18 14:59:16	41.3
12	2021/11/18 14:59:19	41.4
13	2021/11/18 14:59:22	42.7
14	2021/11/18 14:59:25	42.4
15	2021/11/18 14:59:28	42.0
16	2021/11/18 14:59:31	41.0
17	2021/11/18 14:59:34	41.9
18	2021/11/18 14:59:37	43.2
19	2021/11/18 14:59:40	42.9
20	2021/11/18 14:59:43	43.9
21	2021/11/18 14:59:46	44.8
22	2021/11/18 14:59:49	44.4
23	2021/11/18 14:59:52	48.0
24	2021/11/18 14:59:55	45.9
25	2021/11/18 14:59:58	45.6
26	2021/11/18 15:00:01	44.5
27	2021/11/18 15:00:04	50.7
28	2021/11/18 15:00:07	47.8
29	2021/11/18 15:00:10	44.2
30	2021/11/18 15:00:13	44.5
31	2021/11/18 15:00:16	42.7
32	2021/11/18 15:00:19	44.7
33	2021/11/18 15:00:22	44.1
34	2021/11/18 15:00:25	46.0
35	2021/11/18 15:00:28	43.2
36	2021/11/18 15:00:31	45.0
37	2021/11/18 15:00:34	46.8
38	2021/11/18 15:00:37	44.9
39	2021/11/18 15:00:40	43.4
40	2021/11/18 15:00:43	44.5
41	2021/11/18 15:00:46	42.8
42	2021/11/18 15:00:49	43.5
43	2021/11/18 15:00:52	44.5
44	2021/11/18 15:00:55	43.8
45	2021/11/18 15:00:58	43.6
46	2021/11/18 15:01:01	41.8
47	2021/11/18 15:01:04	41.6
48	2021/11/18 15:01:07	42.1
49	2021/11/18 15:01:10	44.6
50	2021/11/18 15:01:13	42.8
51	2021/11/18 15:01:16	41.0
52	2021/11/18 15:01:19	43.1
53	2021/11/18 15:01:22	42.6
54	2021/11/18 15:01:25	41.5
55	2021/11/18 15:01:28	42.0
56	2021/11/18 15:01:31	42.3
57	2021/11/18 15:01:34	42.9
58	2021/11/18 15:01:37	40.8
59	2021/11/18 15:01:40	40.8
60	2021/11/18 15:01:43	41.0
61	2021/11/18 15:01:46	42.7
62	2021/11/18 15:01:49	41.1
63	2021/11/18 15:01:52	41.3
64	2021/11/18 15:01:55	41.5
65	2021/11/18 15:01:58	42.6
66	2021/11/18 15:02:01	42.0
67	2021/11/18 15:02:04	42.4
68	2021/11/18 15:02:07	42.9
69	2021/11/18 15:02:10	42.4
70	2021/11/18 15:02:13	42.8
71	2021/11/18 15:02:16	41.8
72	2021/11/18 15:02:19	42.3
73	2021/11/18 15:02:22	42.1
74	2021/11/18 15:02:25	41.3
75	2021/11/18 15:02:28	41.4
76	2021/11/18 15:02:31	41.7
77	2021/11/18 15:02:34	42.5
78	2021/11/18 15:02:37	42.2
79	2021/11/18 15:02:40	43.2
80	2021/11/18 15:02:43	44.2
81	2021/11/18 15:02:46	43.7
82	2021/11/18 15:02:49	45.2
83	2021/11/18 15:02:52	45.8
84	2021/11/18 15:02:55	44.8
85	2021/11/18 15:02:58	45.5
86	2021/11/18 15:03:01	43.8
87	2021/11/18 15:03:04	42.7
88	2021/11/18 15:03:07	42.4
89	2021/11/18 15:03:10	41.9
90	2021/11/18 15:03:13	41.5

91	2021/11/18	15:03:16	41.4
92	2021/11/18	15:03:19	41.2
93	2021/11/18	15:03:22	41.5
94	2021/11/18	15:03:25	42.1
95	2021/11/18	15:03:28	41.5
96	2021/11/18	15:03:31	41.8
97	2021/11/18	15:03:34	41.7
98	2021/11/18	15:03:37	41.5
99	2021/11/18	15:03:40	41.1
100	2021/11/18	15:03:43	42.3
101	2021/11/18	15:03:46	41.7
102	2021/11/18	15:03:49	41.9
103	2021/11/18	15:03:52	43.8
104	2021/11/18	15:03:55	42.2
105	2021/11/18	15:03:58	42.2
106	2021/11/18	15:04:01	42.6
107	2021/11/18	15:04:04	42.6
108	2021/11/18	15:04:07	43.9
109	2021/11/18	15:04:10	44.1
110	2021/11/18	15:04:13	44.4
111	2021/11/18	15:04:16	45.6
112	2021/11/18	15:04:19	47.1
113	2021/11/18	15:04:22	46.8
114	2021/11/18	15:04:25	44.3
115	2021/11/18	15:04:28	44.7
116	2021/11/18	15:04:31	44.2
117	2021/11/18	15:04:34	42.7
118	2021/11/18	15:04:37	42.7
119	2021/11/18	15:04:40	43.5
120	2021/11/18	15:04:43	44.4
121	2021/11/18	15:04:46	42.3
122	2021/11/18	15:04:49	42.1
123	2021/11/18	15:04:52	41.9
124	2021/11/18	15:04:55	42.2
125	2021/11/18	15:04:58	43.9
126	2021/11/18	15:05:01	44.9
127	2021/11/18	15:05:04	44.9
128	2021/11/18	15:05:07	45.0
129	2021/11/18	15:05:10	47.3
130	2021/11/18	15:05:13	45.5
131	2021/11/18	15:05:16	44.5
132	2021/11/18	15:05:19	47.2
133	2021/11/18	15:05:22	44.4
134	2021/11/18	15:05:25	44.4
135	2021/11/18	15:05:28	45.5
136	2021/11/18	15:05:31	47.9
137	2021/11/18	15:05:34	50.5
138	2021/11/18	15:05:37	53.0
139	2021/11/18	15:05:40	54.5
140	2021/11/18	15:05:43	51.7
141	2021/11/18	15:05:46	51.9
142	2021/11/18	15:05:49	52.3
143	2021/11/18	15:05:52	54.4
144	2021/11/18	15:05:55	52.3
145	2021/11/18	15:05:58	53.1
146	2021/11/18	15:06:01	53.0
147	2021/11/18	15:06:04	50.9
148	2021/11/18	15:06:07	52.2
149	2021/11/18	15:06:10	50.8
150	2021/11/18	15:06:13	50.7
151	2021/11/18	15:06:16	49.2
152	2021/11/18	15:06:19	47.4
153	2021/11/18	15:06:22	45.2
154	2021/11/18	15:06:25	44.7
155	2021/11/18	15:06:28	46.7
156	2021/11/18	15:06:31	45.1
157	2021/11/18	15:06:34	47.5
158	2021/11/18	15:06:37	43.8
159	2021/11/18	15:06:40	42.5
160	2021/11/18	15:06:43	42.4
161	2021/11/18	15:06:46	41.3
162	2021/11/18	15:06:49	41.9
163	2021/11/18	15:06:52	41.7
164	2021/11/18	15:06:55	41.9
165	2021/11/18	15:06:58	41.1
166	2021/11/18	15:07:01	41.5
167	2021/11/18	15:07:04	41.7
168	2021/11/18	15:07:07	42.1
169	2021/11/18	15:07:10	40.6
170	2021/11/18	15:07:13	40.8
171	2021/11/18	15:07:16	40.4
172	2021/11/18	15:07:19	40.5
173	2021/11/18	15:07:22	41.3
174	2021/11/18	15:07:25	43.0
175	2021/11/18	15:07:28	46.4
176	2021/11/18	15:07:31	41.5
177	2021/11/18	15:07:34	41.7
178	2021/11/18	15:07:37	41.1
179	2021/11/18	15:07:40	41.5
180	2021/11/18	15:07:43	39.9
181	2021/11/18	15:07:46	40.5
182	2021/11/18	15:07:49	41.0
183	2021/11/18	15:07:52	41.6
184	2021/11/18	15:07:55	40.9
185	2021/11/18	15:07:58	40.0
186	2021/11/18	15:08:01	39.5
187	2021/11/18	15:08:04	40.0
188	2021/11/18	15:08:07	39.6
189	2021/11/18	15:08:10	38.9
190	2021/11/18	15:08:13	39.9
191	2021/11/18	15:08:16	40.3
192	2021/11/18	15:08:19	40.0
193	2021/11/18	15:08:22	39.5
194	2021/11/18	15:08:25	40.2

195	2021/11/18	15:08:28	40.7
196	2021/11/18	15:08:31	40.1
197	2021/11/18	15:08:34	40.3
198	2021/11/18	15:08:37	40.0
199	2021/11/18	15:08:40	40.1
200	2021/11/18	15:08:43	40.3
201	2021/11/18	15:08:46	41.8
202	2021/11/18	15:08:49	42.4
203	2021/11/18	15:08:52	42.5
204	2021/11/18	15:08:55	42.1
205	2021/11/18	15:08:58	42.1
206	2021/11/18	15:09:01	42.6
207	2021/11/18	15:09:04	42.3
208	2021/11/18	15:09:07	43.3
209	2021/11/18	15:09:10	42.4
210	2021/11/18	15:09:13	48.1
211	2021/11/18	15:09:16	44.7
212	2021/11/18	15:09:19	44.5
213	2021/11/18	15:09:22	44.1
214	2021/11/18	15:09:25	44.0
215	2021/11/18	15:09:28	44.1
216	2021/11/18	15:09:31	45.8
217	2021/11/18	15:09:34	42.3
218	2021/11/18	15:09:37	43.6
219	2021/11/18	15:09:40	43.2
220	2021/11/18	15:09:43	47.6
221	2021/11/18	15:09:46	41.6
222	2021/11/18	15:09:49	50.1
223	2021/11/18	15:09:52	42.8
224	2021/11/18	15:09:55	40.8
225	2021/11/18	15:09:58	42.2
226	2021/11/18	15:10:01	41.9
227	2021/11/18	15:10:04	41.9
228	2021/11/18	15:10:07	43.6
229	2021/11/18	15:10:10	44.2
230	2021/11/18	15:10:13	44.9
231	2021/11/18	15:10:16	46.9
232	2021/11/18	15:10:19	46.9
233	2021/11/18	15:10:22	50.4
234	2021/11/18	15:10:25	52.2
235	2021/11/18	15:10:28	65.6
236	2021/11/18	15:10:31	59.4
237	2021/11/18	15:10:34	50.5
238	2021/11/18	15:10:37	46.6
239	2021/11/18	15:10:40	45.7
240	2021/11/18	15:10:43	45.1
241	2021/11/18	15:10:46	46.9
242	2021/11/18	15:10:49	45.6
243	2021/11/18	15:10:52	44.2
244	2021/11/18	15:10:55	46.6
245	2021/11/18	15:10:58	50.1
246	2021/11/18	15:11:01	49.0
247	2021/11/18	15:11:04	51.9
248	2021/11/18	15:11:07	50.2
249	2021/11/18	15:11:10	53.1
250	2021/11/18	15:11:13	52.6
251	2021/11/18	15:11:16	50.4
252	2021/11/18	15:11:19	48.5
253	2021/11/18	15:11:22	47.5
254	2021/11/18	15:11:25	46.6
255	2021/11/18	15:11:28	48.3
256	2021/11/18	15:11:31	47.2
257	2021/11/18	15:11:34	45.7
258	2021/11/18	15:11:37	46.6
259	2021/11/18	15:11:40	46.3
260	2021/11/18	15:11:43	45.7
261	2021/11/18	15:11:46	44.7
262	2021/11/18	15:11:49	45.2
263	2021/11/18	15:11:52	46.5
264	2021/11/18	15:11:55	46.2
265	2021/11/18	15:11:58	46.6
266	2021/11/18	15:12:01	47.7
267	2021/11/18	15:12:04	46.8
268	2021/11/18	15:12:07	47.6
269	2021/11/18	15:12:10	47.3
270	2021/11/18	15:12:13	47.1
271	2021/11/18	15:12:16	47.4
272	2021/11/18	15:12:19	49.9
273	2021/11/18	15:12:22	47.8
274	2021/11/18	15:12:25	47.7
275	2021/11/18	15:12:28	46.0
276	2021/11/18	15:12:31	46.2
277	2021/11/18	15:12:34	44.7
278	2021/11/18	15:12:37	47.1
279	2021/11/18	15:12:40	45.7
280	2021/11/18	15:12:43	45.4
281	2021/11/18	15:12:46	42.4
282	2021/11/18	15:12:49	40.7
283	2021/11/18	15:12:52	39.9
284	2021/11/18	15:12:55	41.5
285	2021/11/18	15:12:58	40.5
286	2021/11/18	15:13:01	40.7
287	2021/11/18	15:13:04	43.7
288	2021/11/18	15:13:07	46.2
289	2021/11/18	15:13:10	45.9
290	2021/11/18	15:13:13	42.4
291	2021/11/18	15:13:16	41.4
292	2021/11/18	15:13:19	40.6
293	2021/11/18	15:13:22	40.6
294	2021/11/18	15:13:25	41.8
295	2021/11/18	15:13:28	43.7
296	2021/11/18	15:13:31	42.2
297	2021/11/18	15:13:34	41.7
298	2021/11/18	15:13:37	41.8

299	2021/11/18 15:13:40	41.9
300	2021/11/18 15:13:43	40.2

Appendix B

Roadway Construction Noise Model (RCNM) Results

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/24/2022
Case Description: Blackhall Studios

				---- Receptor #1 ----			
		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
Residential	Residential	80	80	80			

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Grader	No	40	85		200	0
Front End Loader	No	40		79.1	200	0
Dump Truck	No	40		76.5	200	0

		Results	
		Calculated (dBA)	
Equipment		*Lmax	Leq
Grader		73	69
Front End Loader		67.1	63.1
Dump Truck		64.4	60.4
	Total	73	70.4

*Calculated Lmax is the Loudest value.

Appendix C

Mechanical Equipment Specifications

SUBMITTAL DATA

122313 - Blackhall Studios

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Technical Data Sheet for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	07.91
Unit Tag	AC-1A, AC-2A, AC-3A, AC-4A, AC-10A, AC-11A, AC-12A, AC-13A, AC-14A, AC-15A, AC-16A, AC-17A, AC-18A, AC-18B
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RDT101D	460/60/3	914426	10.3	2016 Compliant

Unit

Model Number:	RDT101D
Altitude:	0 ft
Heat Type:	None
Condenser Type:	Air-Cooled
Condenser Sound:	Quiet Condenser Fans
Approval	ETL/MEA-USA unit

Physical

Unit

Length	Height	Width	Weight	Estimated Lifting Lugs
379 in	97.0 in	99.0 in	13059 lb	3 per side

Electrical

Voltage	MCA	MROPD	SCCR
460/60/3	223.5 A	250 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Return/Outside/Exhaust Air

Outside Air Option

Type	Pressure Drop	Damper Actuator
California and90.1 Compliant Economizer	0.20 inH_2O	Electric Actuator

Return Air Option

Return Air Location:	Back

Filter Section

Physical

Type	(Quantity) Height x Width x Depth	Face Area	Face Velocity	Air Pressure Drop
2 in. 85% Nominal Efficiency (MERV 13)	(11) 16 in x 20 in x 2 in (33) 16 in x 25 in x 2 in	116.1 ft^2	258.4 ft/min	0.15 inH_2O

Technical Data Sheet for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B

DX Cooling Coil

Physical

Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material	Casing Material
10	5	60.8 ft²	493.4 ft/min	0.60 inH_2O	Stainless Steel	Stainless Steel

Cooling Performance

Capacity		Refrigerant Type	Indoor Air Temperature				Ambient Air Temperature	
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr		Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F
914426	879764	R410A	74.0	58.3	47.2	46.6	105.0	70.0

Biological Control:	UV Light

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation	Fan Efficiency Index
AF SWSI	44 in	Spring	0.561

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower
30000 CFM	3.45 inH_2O	931 rpm	29.33 HP

Motor			Drive
Type	Horsepower	FLA	Type
ODP, Premium Efficiency	40.0 hp	46.0 A	Standard service factor, Fixed drive

Discharge Location:	Left Side

Unit Discharge Conditions

AirTemperature

DX coil Configuration:	Draw-thru Coil			
Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
84846	30.0	49.8	47.4	46.0

Technical Data Sheet for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B

Condensing Section

Compressor

Type	Quantity	Total Power	Capacity Control	Compressor Isolation
Scroll	6	91.0 kW	6 stage	Resilient

Compressor Amps:

Fixed Speed Compressor 1	23.1 A
Fixed Speed Compressor 2	26.9 A
Fixed Speed Compressor 3	23.1 A
Fixed Speed Compressor 4	26.9 A
Fixed Speed Compressor 5	23.1 A
Fixed Speed Compressor 6	26.9 A

Compressor Options:	Refrigeration Service Valves
Piping Options:	Hot gas bypass, circuit 1, 2, Replaceable core filter drier

Condenser Coil

Type	Fins per Inch	Fin Material	Refrigerant Charge
Aluminum tube MicroChannel	18	Aluminum	106.6 lb

Condenser Coil Options:	Build in Hail Protection

Condenser Fan Motors

Number of Motors	Full Load Current (each)
9	1.5 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

EER	IEER	ASHRAE 90.1
10.3	13.4	2016 Compliant

Sound

Sound Power (db)

Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	87	86	81	76	73	66	58	50
Discharge	88	85	81	79	78	73	65	58
Radiated	-	95	85	85	87	86	79	73

Supply Fan Total Pressure Drop Calculation

External Static Pressure:	1.50 inH_2O
Filter:	0.15 inH_2O
Dirty Filter:	1.00 inH_2O
Outside Air:	0.20 inH_2O
DX Coil:	0.60 inH_2O
Total Static Pressure:	3.45 inH_2O

Technical Data Sheet for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B

Options	
Unit	
Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Underliners:	Sheet Metal Underliner - Recommended for rail mounted units
Fan Section Lights:	Supply Fan Section Light
Fan Shaft Grounding:	Fan motors are provided with shaft grounding rings and class H insulation.
Electrical	
Electrical Connection Option:	Single thru door disconnect switch
GFI 115v Receptacle:	Field powered
Power Options:	Phase Failure and Groundfault Protection
Controls	
Application:	Variable Volume - Discharge Air Control
Temperature Control:	DAC, BACNet MSTP communication card
Fan Speed Control:	Factory mounted Inverter
Inverter Manufacturer:	Daikin
Inverter Location:	Inverter(s) in fan section
Airflow Control:	1 duct sensor
Economizer Control:	Outside Air Dry Bulb and Enthalpy Control
Bypass Contactors:	Factory mounted Bypass Contactors
Low Ambient:	Speedtrol, operation to 0 deg F (-18 deg C)

Warranty	
Parts:	Standard 1 year
Compressor:	Extended 4 year, 5 year total

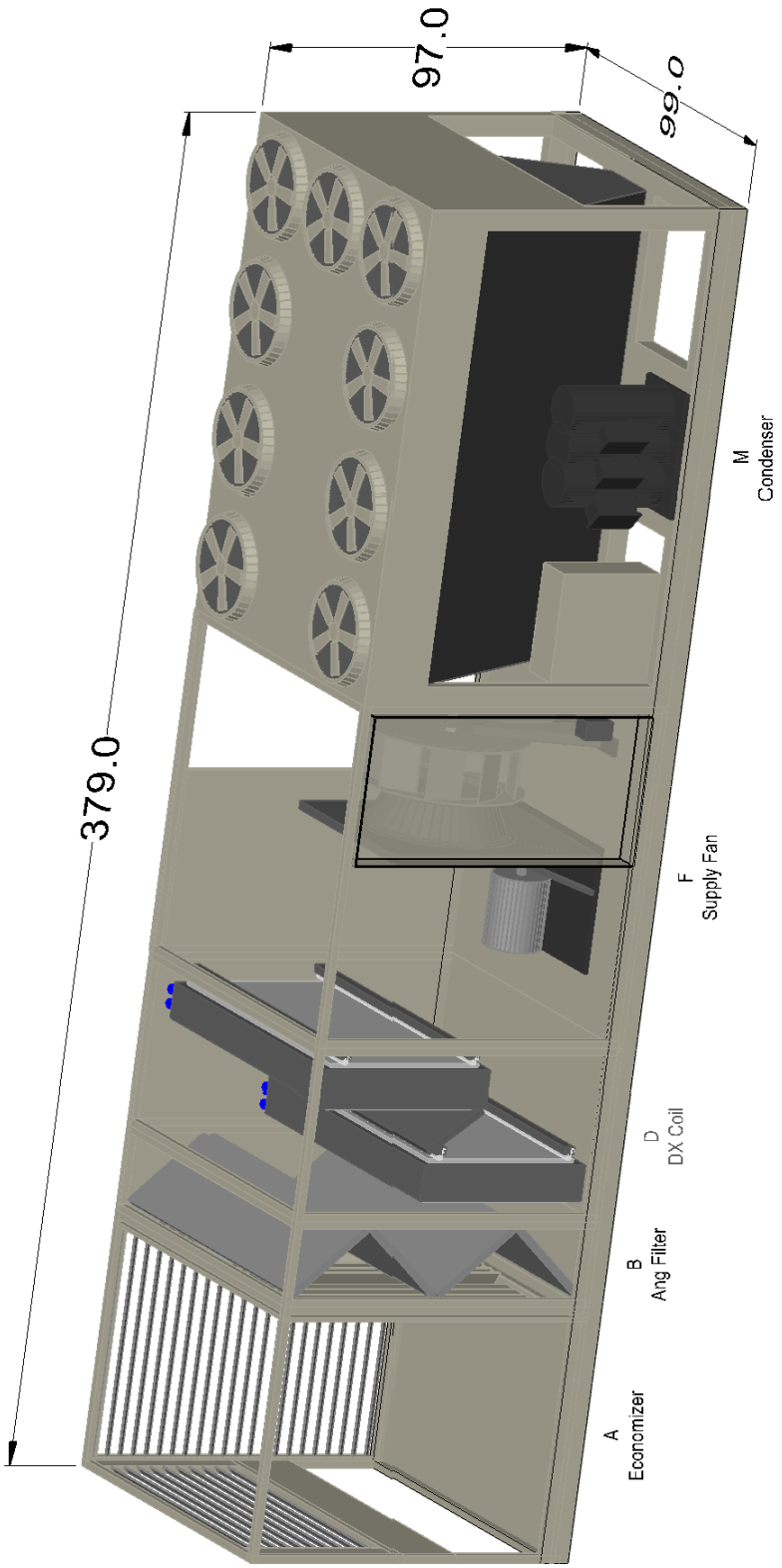
AHRI Certification

All equipment is rated and certified in accordance with AHRI 360.

Specials	
Unit	
Specials Description:	Provide 65 kAIC rating. Unit is provided with higher than standard SCCR rating and must be marked as a special for processing. Pricing is already accounted for in the item summary. Use FPA# "SCCR" Unit provided with factory wired terminals for Purge Sequence. Unit will be marked as a special for processing . Use FPA# "Purge" if no other specials from Applications. Provide Condensate Overflow alarm for Cooling Coil drain pan. Provide Stainless Steel coil casing on DX coil. Unit will be marked as a special for processing. Use FPA# "SSCasing" if no other specials from Applications Provide a 72" economizer section with reduced return opening. Unit must be marked as a special for processing. Use FPA# "72Econo" if no other specials from Applications.

Notes

Unit has been selected with bare condenser coil. Is this application more than 50 miles from the coast?



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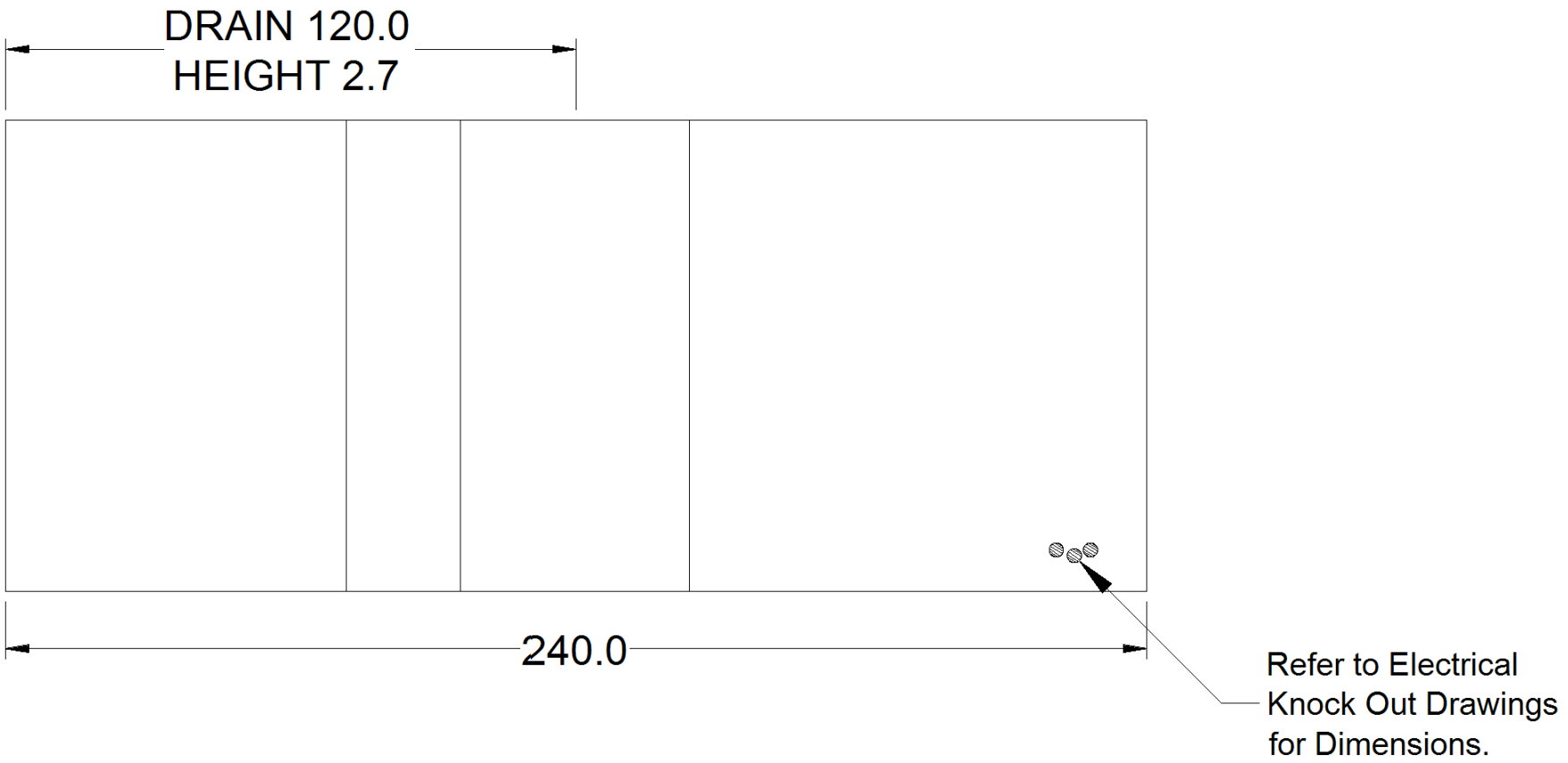
Product:	Project Name: 122313 - Blackhall Studios	Sales Engineer:	
Model: RDT101D	Feb. 02, 2022 | Ver/Rev: | Sheet: 1 of 1	Scale: NTS | Tolerance: +/- 0.25" | Dwg Units: in [mm]	

DAIKIN

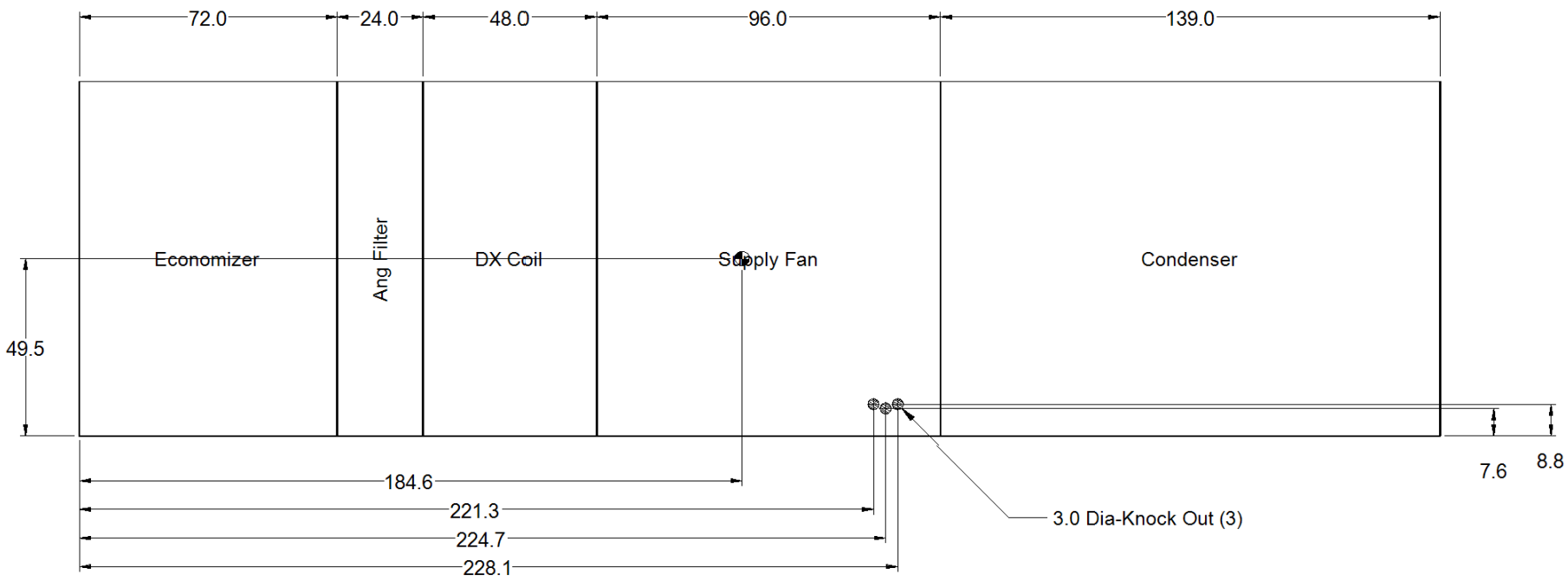
13600 Industrial Park Blvd. Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 07.91



PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25”	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Drawings(3) for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B



PLAN VIEW - KNOCK OUTS & CENTER-OF-GRAVITY

Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

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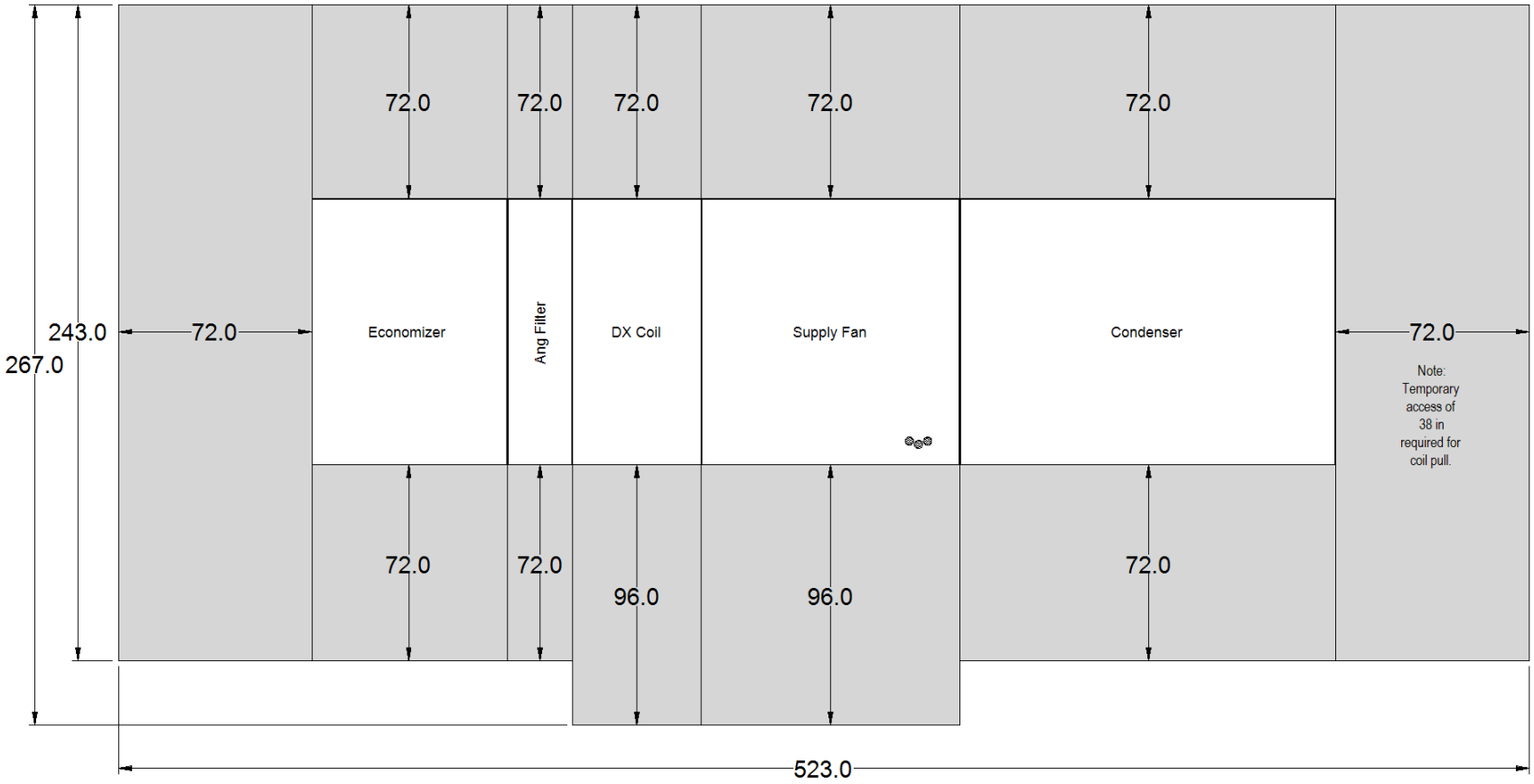
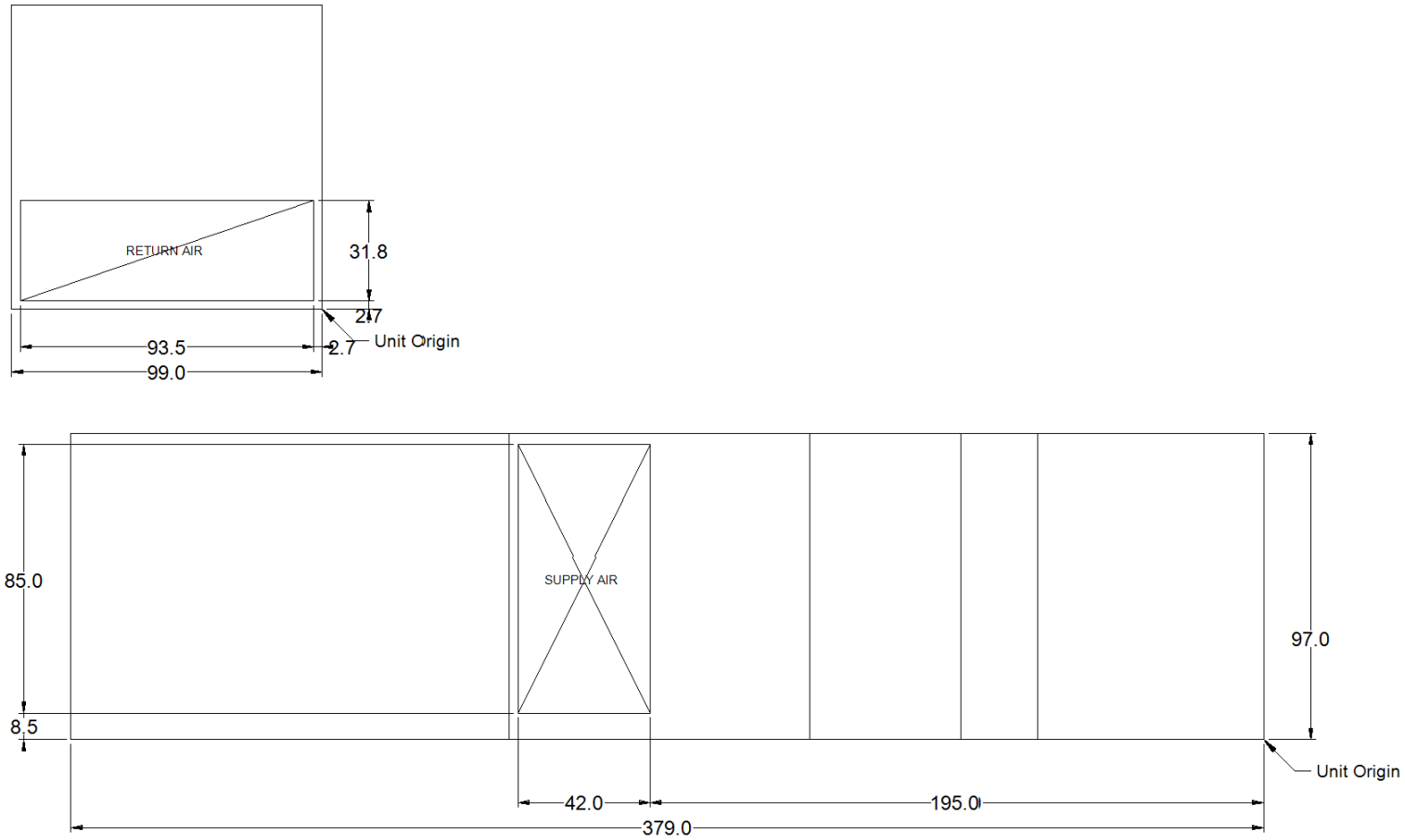


PLAN VIEW - SERVICE CLEARANCE

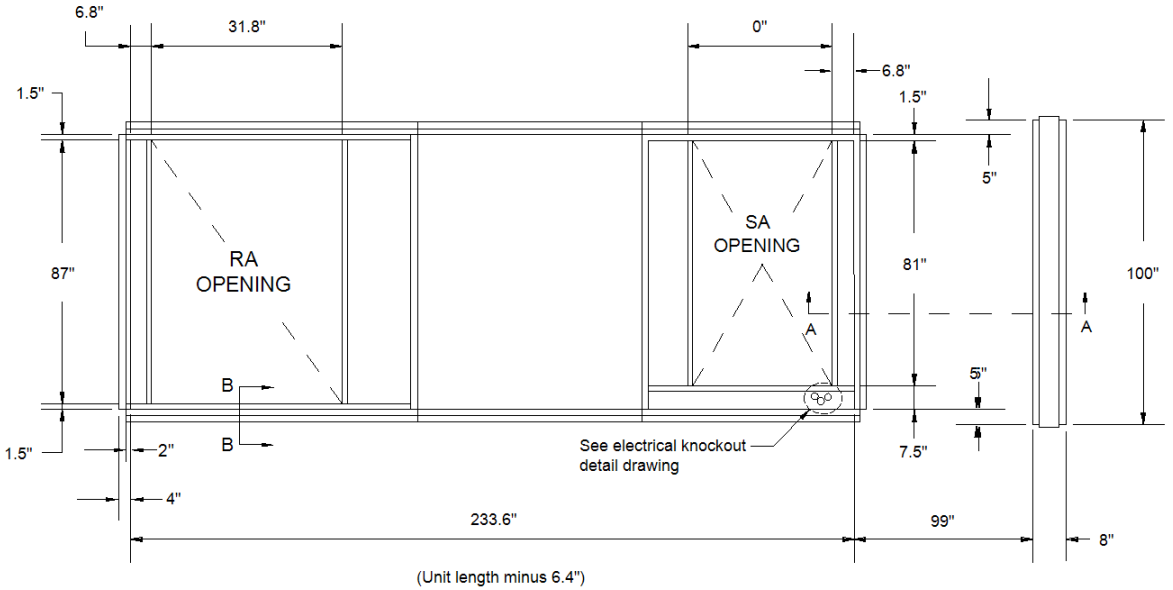
Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



ELEVATION VIEW - UNIT FACE DETAIL

Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

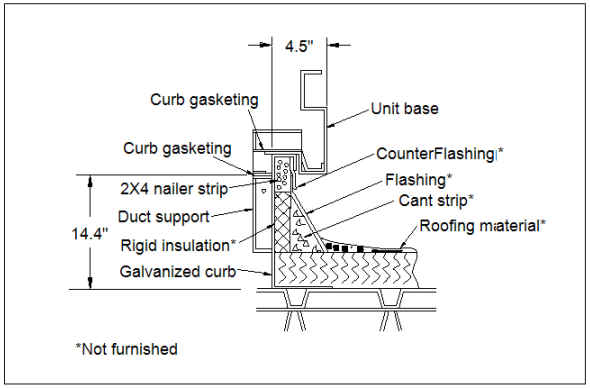
Curb Weight: 650 lbs.



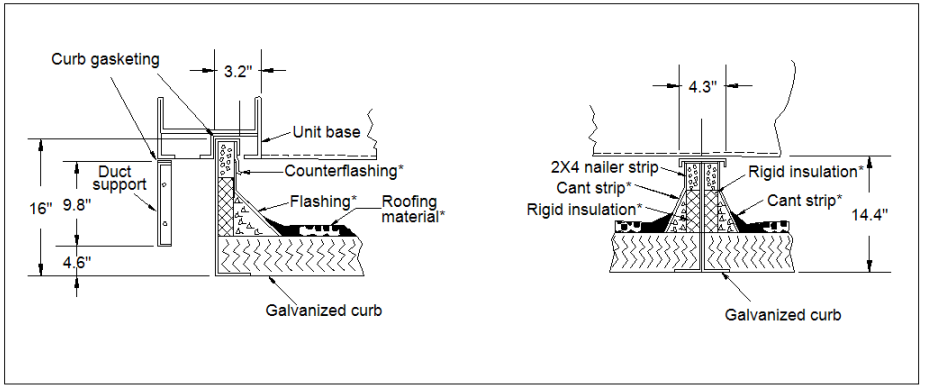
Note:
Curb must be installed level.

(Unit length minus 6.4")

Cross-section B-B

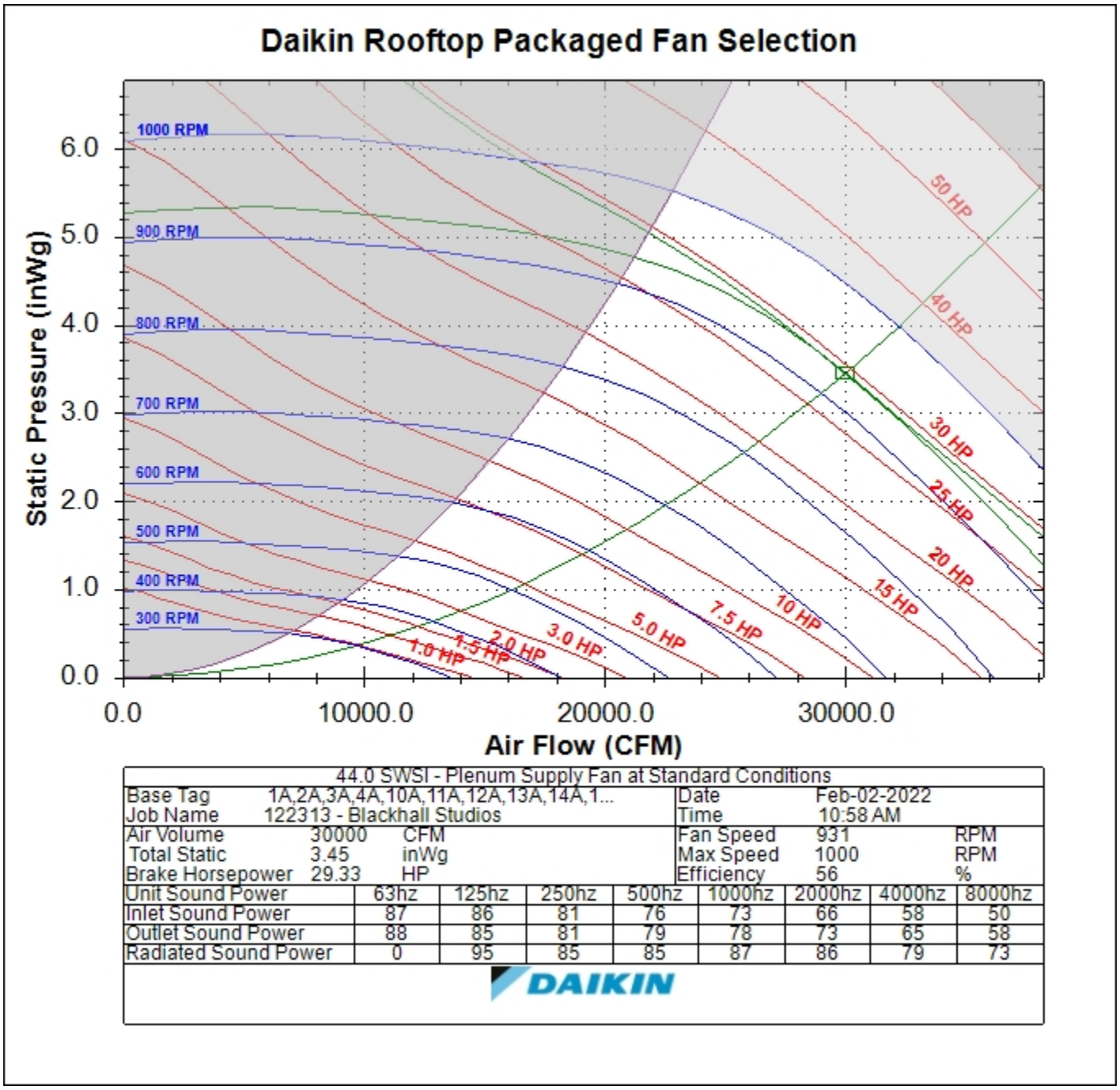


Cross-Section A-A



Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

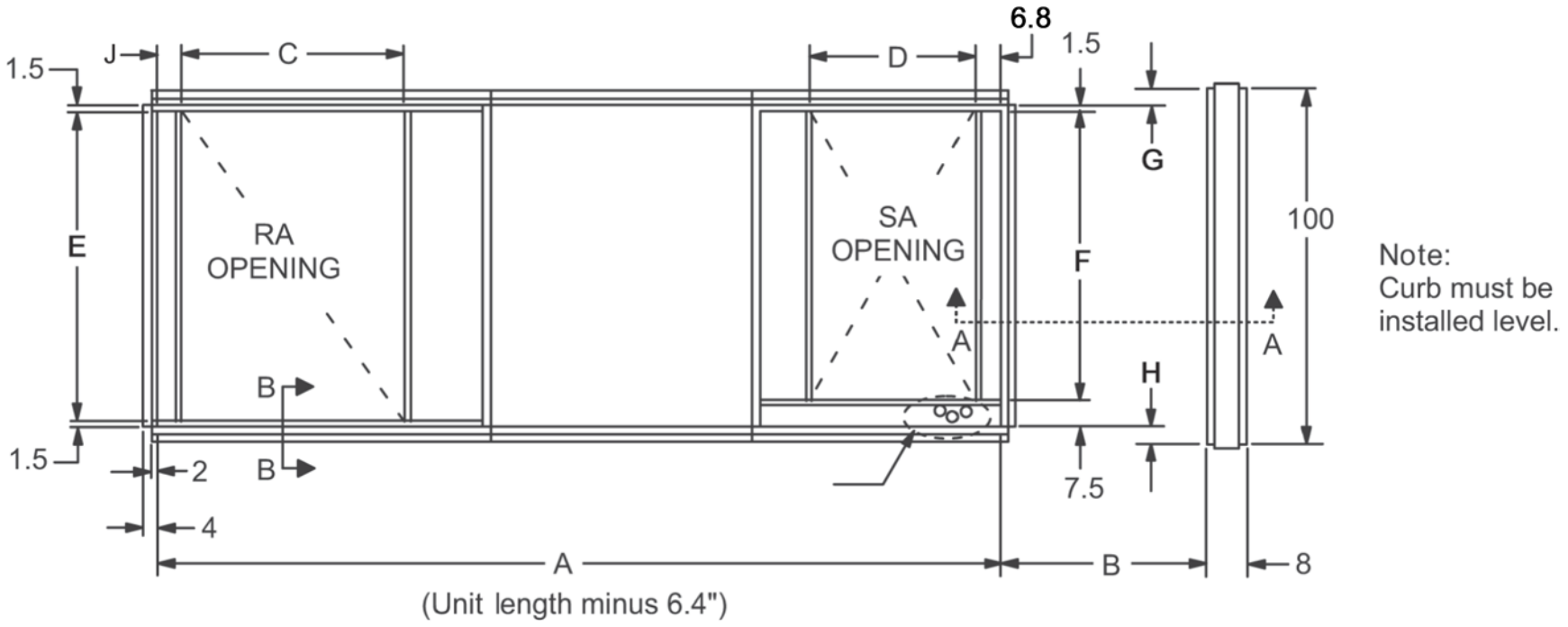
Fan Curve - Supply for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B



44.0 SWSI - Plenum Supply Fan at Standard Conditions								
Base Tag	1A,2A,3A,4A,10A,11A,12A,13A,14A,1...				Date	Feb-02-2022		
Job Name	122313 - Blackhall Studios				Time	10:58 AM		
Air Volume	30000	CFM			Fan Speed	931	RPM	
Total Static	3.45	inWg			Max Speed	1000	RPM	
Brake Horsepower	29.33	HP			Efficiency	56	%	
Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	87	86	81	76	73	66	58	50
Outlet Sound Power	88	85	81	79	78	73	65	58
Radiated Sound Power	0	95	85	85	87	86	79	73

DAIKIN

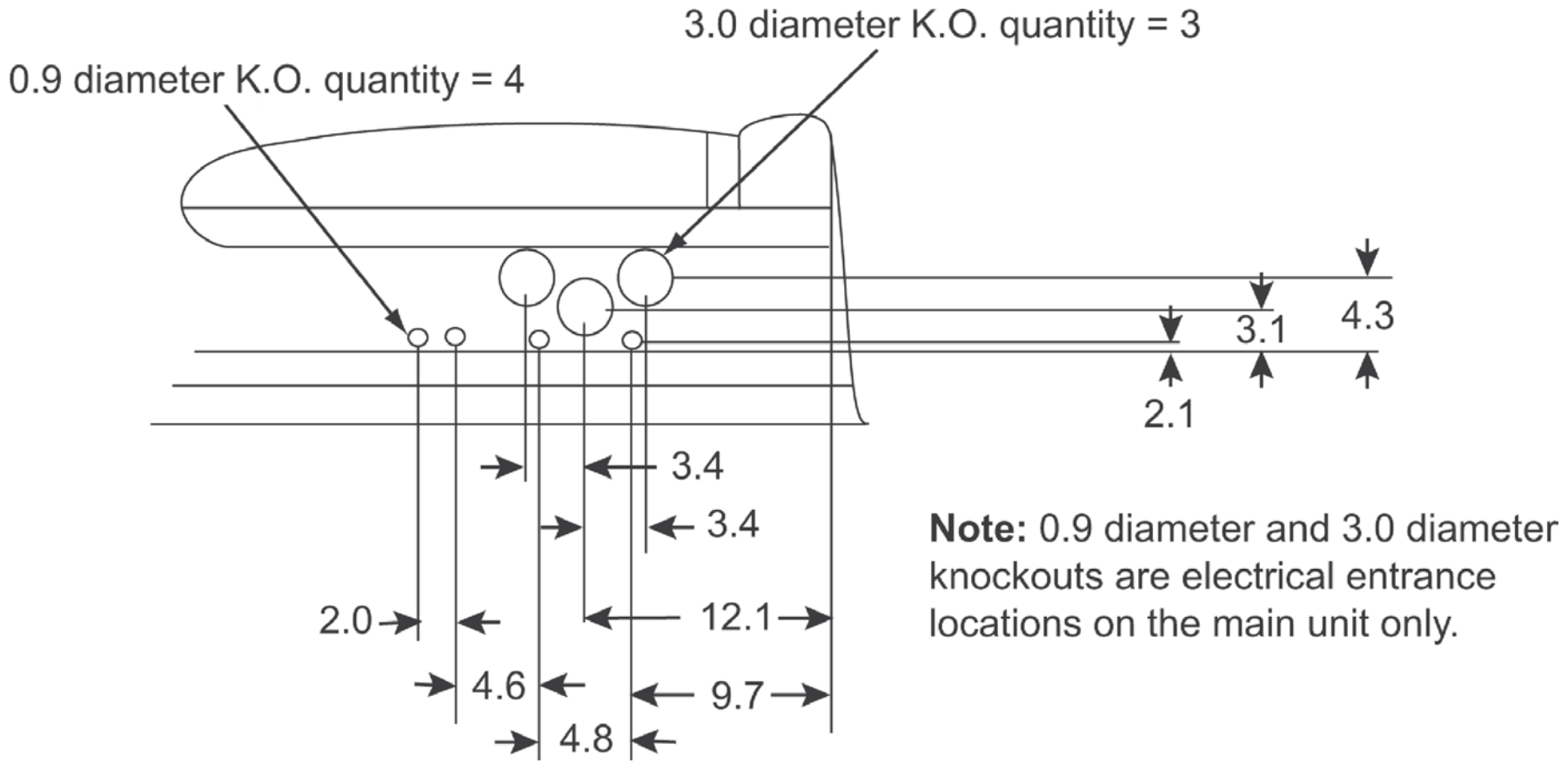
Dimensions		
Description	**Letter**	**Dimensions (in)**
Curb Length	A	233.6
Condenser Rail	B	99.0
Return Air Opening Length	C	31.8
Supply Air Opening Length	D	0.0
Return Air Opening Width	E	87.0
Supply Air Opening Width	F	81.0
Condenser Rail Overhang	G	5.0
Condenser Rail Overhang	H	5.0
Return Air Opening Location	J	6.8



Note:
Curb must be installed level.

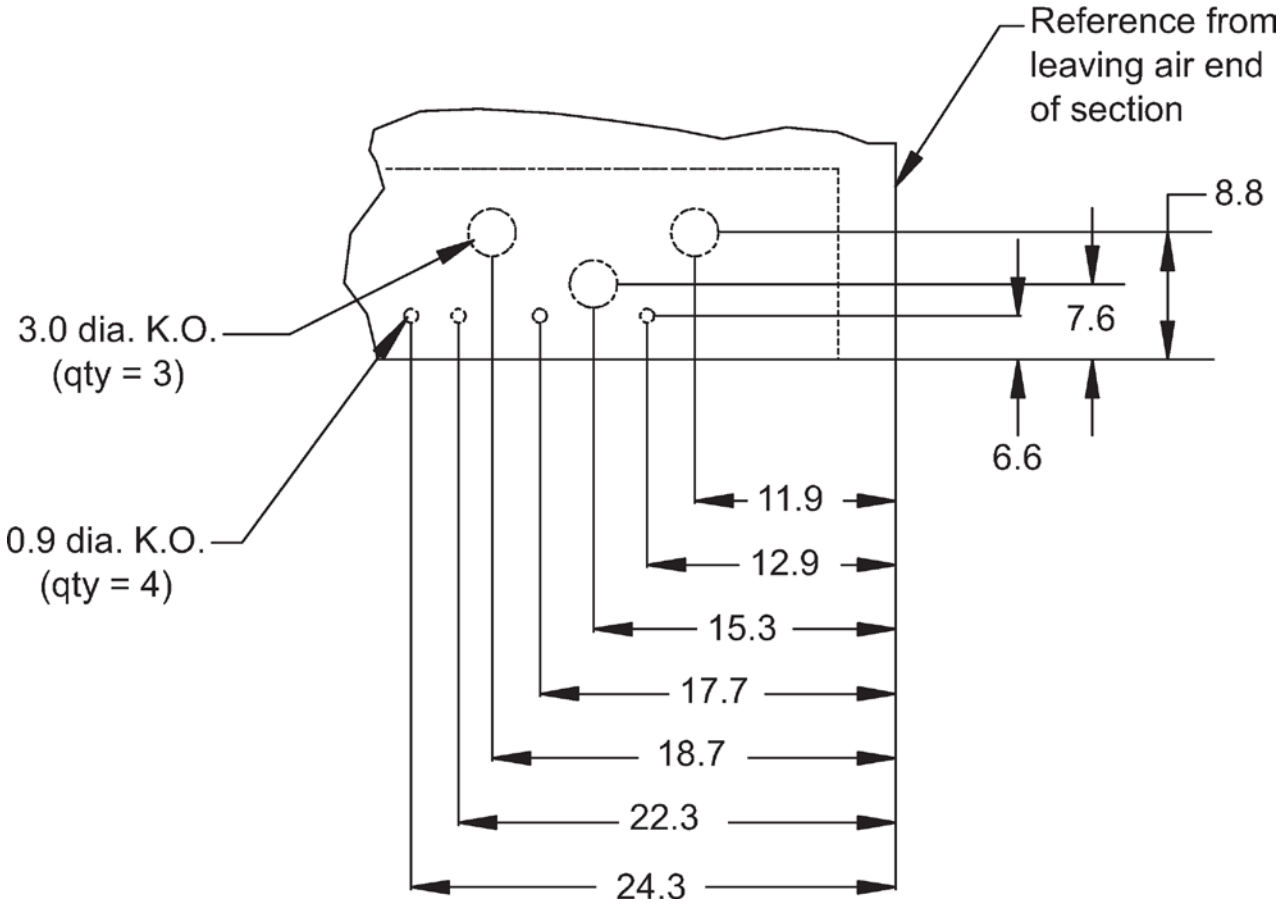
Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: (in)	www.DaikinApplied.com Software Version: 07.91

Roofcurb Knockout medium large box_Drawing for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B



Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Unit Knockout, Large Box_Drawing for 1A,2A,3A,4A,10A,11A,12A,13A,14A,15A,16A,17A,18A18B



Product Drawing	Unit Tag:			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT101D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Technical Data Sheet for AC-19A

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	07.91
Unit Tag	AC-19A
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RDT071D	460/60/3	659146	9.9	2016 Compliant

Unit

Model Number:	RDT071D
Altitude:	0 ft
Heat Type:	None
Condenser Type:	Air-Cooled
Condenser Sound:	Quiet Condenser Fans
Approval	ETL/MEA-USA unit

Physical

Unit

Length	Height	Width	Weight	Estimated Lifting Lugs
322 in	73.0 in	99.0 in	10202 lb	2 per side

Electrical

Voltage	MCA	MROPD	SCCR
460/60/3	155.8 A	175 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Return/Outside/Exhaust Air

Outside Air Option

Type	Pressure Drop	Damper Actuator
California and90.1 Compliant Economizer	0.19 inH_2O	Electric Actuator

Return Air Option

Return Air Location:	Back

Filter Section

Physical

Type	(Quantity) Height x Width x Depth	Face Area	Face Velocity	Air Pressure Drop
2 in. 85% Nominal Efficiency (MERV 13)	(7) 16 in x 20 in x 2 in (21) 16 in x 25 in x 2 in	73.9 ft^2	297.7 ft/min	0.18 inH_2O

Technical Data Sheet for AC-19A

DX Cooling Coil

Physical

Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material	Casing Material
12	6	39.5 ft²	557.0 ft/min	1.02 inH_2O	Stainless Steel	Stainless Steel

Cooling Performance

Capacity		Refrigerant Type	Indoor Air Temperature				Ambient Air Temperature	
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr		Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F
659146	642653	R410A	74.0	58.3	47.3	46.8	105.0	70.0

Biological Control: UV Light

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation	Fan Efficiency Index
AF SWSI	40 in	Spring	0.714

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower
22000 CFM	3.89 inH_2O	989 rpm	21.39 HP

Motor			Drive
Type	Horsepower	FLA	Type
ODP, Premium Efficiency	25.0 hp	30.0 A	Standard service factor, Fixed drive

Discharge Location: Left Side

Unit Discharge Conditions

AirTemperature

DX coil Configuration: Draw-thru Coil

Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
60830	13.8	49.8	47.6	46.3

Technical Data Sheet for AC-19A

Condensing Section

Compressor

Type	Quantity	Total Power	Capacity Control	Compressor Isolation
Scroll	6	69.0 kW	6 stage	Resilient

Compressor Amps:

Fixed Speed Compressor 1	17.9 A
Fixed Speed Compressor 2	17.9 A
Fixed Speed Compressor 3	17.9 A
Fixed Speed Compressor 4	17.9 A
Fixed Speed Compressor 5	17.9 A
Fixed Speed Compressor 6	17.9 A

Compressor Options:	Refrigeration Service Valves
Piping Options:	Hot gas bypass, circuit 1, 2, Replaceable core filter drier

Condenser Coil

Type	Fins per Inch	Fin Material	Refrigerant Charge
Aluminum tube MicroChannel	18	Aluminum	63.0 lb

Condenser Coil Options:	Build in Hail Protection

Condenser Fan Motors

Number of Motors	Full Load Current (each)
6	1.5 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

EER	IEER	ASHRAE 90.1
9.9	14	2016 Compliant

Sound

Sound Power (db)

Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	84	83	78	73	70	63	55	47
Discharge	85	82	78	76	75	70	62	55
Radiated	-	92	83	84	86	84	77	73

Supply Fan Total Pressure Drop Calculation

External Static Pressure:	1.50 inH_2O
Filter:	0.18 inH_2O
Dirty Filter:	1.00 inH_2O
Outside Air:	0.19 inH_2O
DX Coil:	1.02 inH_2O
Total Static Pressure:	3.89 inH_2O

Technical Data Sheet for AC-19A

Options	
Unit	
Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Underliners:	Sheet Metal Underliner - Recommended for rail mounted units
Fan Section Lights:	Supply Fan Section Light
Fan Shaft Grounding:	Fan motors are provided with shaft grounding rings and class H insulation.
Electrical	
Electrical Connection Option:	Single thru door disconnect switch
GFI 115v Receptacle:	Field powered
Power Options:	Phase Failure and Groundfault Protection
Controls	
Application:	Variable Volume - Discharge Air Control
Temperature Control:	DAC, BACNet MSTP communication card
Fan Speed Control:	Factory mounted Inverter
Inverter Manufacturer:	Daikin
Inverter Location:	Inverter(s) in fan section
Airflow Control:	1 duct sensor
Economizer Control:	Outside Air Dry Bulb and Enthalpy Control
Bypass Contactors:	Factory mounted Bypass Contactors
Low Ambient:	Speedtrol, operation to 0 deg F (-18 deg C)

Warranty	
Parts:	Standard 1 year
Compressor:	Extended 4 year, 5 year total

AHRI Certification

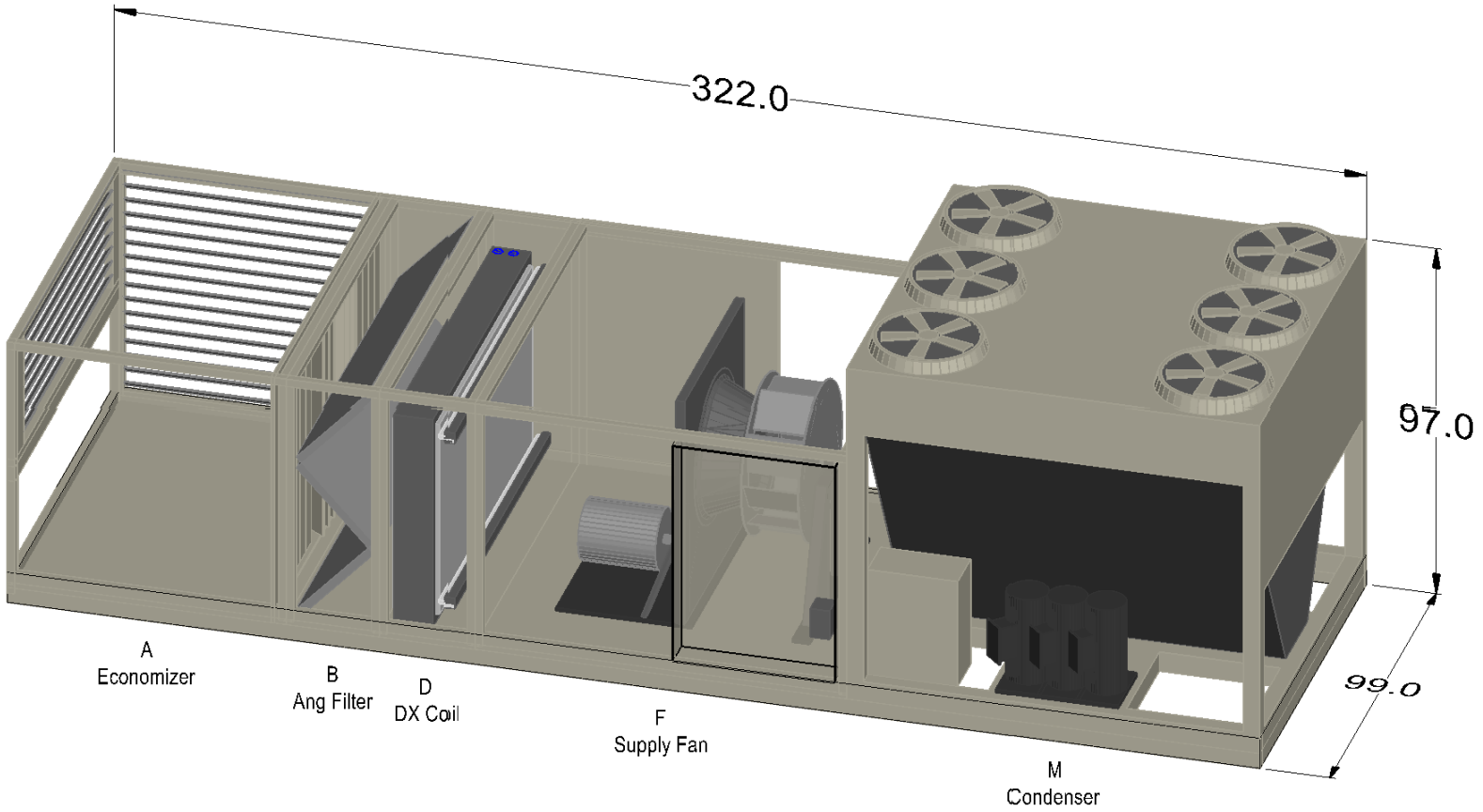
All equipment is rated and certified in accordance with AHRI 360.

Specials	
Unit	
Specials Description:	Provide 65 kAIC rating. Unit is provided with higher than standard SCCR rating and must be marked as a special for processing. Pricing is already accounted for in the item summary. Use FPA# "SCCR" Unit provided with factory wired terminals for Purge Sequence. Unit will be marked as a special for processing . Use FPA# "Purge" if no other specials from Applications. Provide Condensate Overflow alarm for Cooling Coil drain pan. Provide Stainless Steel coil casing on DX coil. Unit will be marked as a special for processing. Use FPA# "SSCasing" if no other specials from Applications

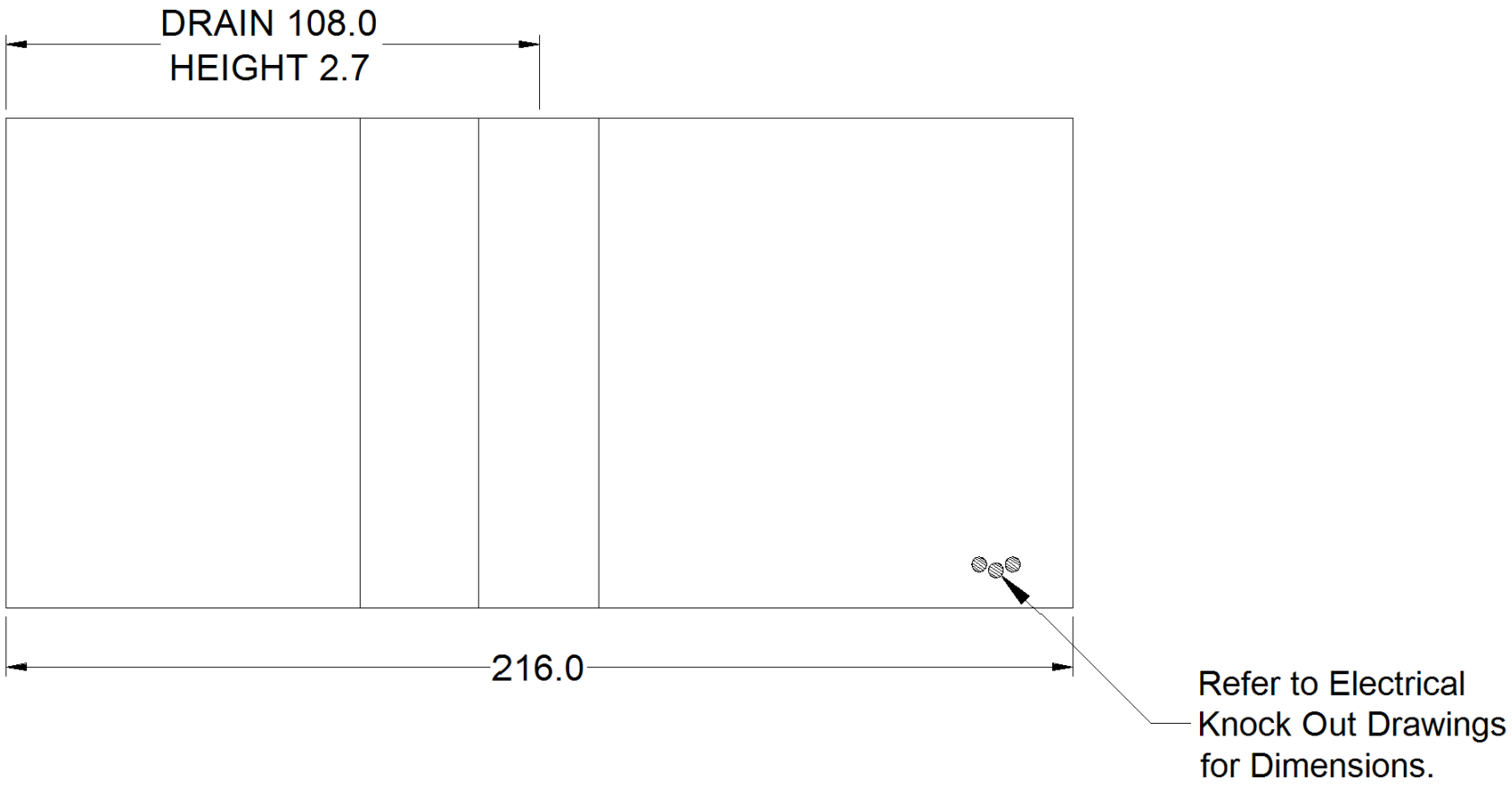
Notes

Unit has been selected with bare condenser coil. Is this application more than 50 miles from the coast?

Drawings(1) for AC-19A

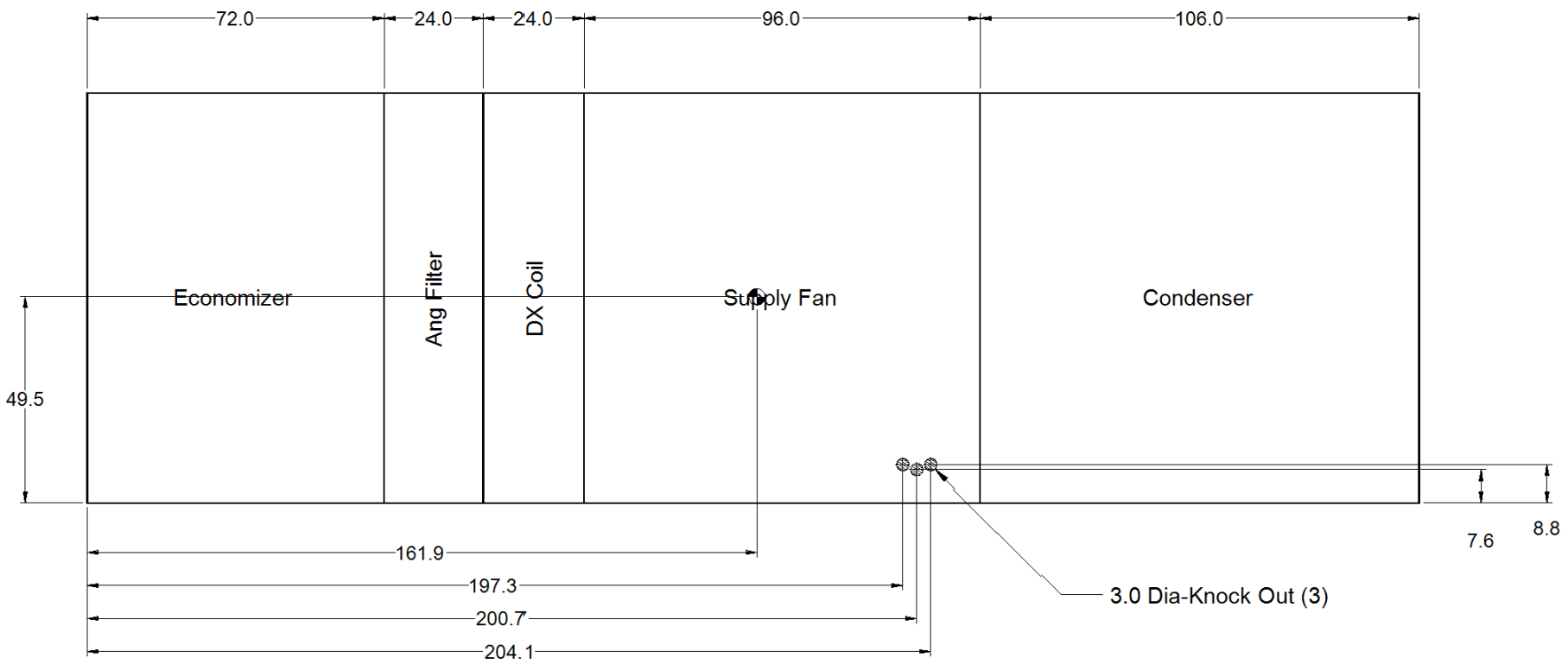


Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25”	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



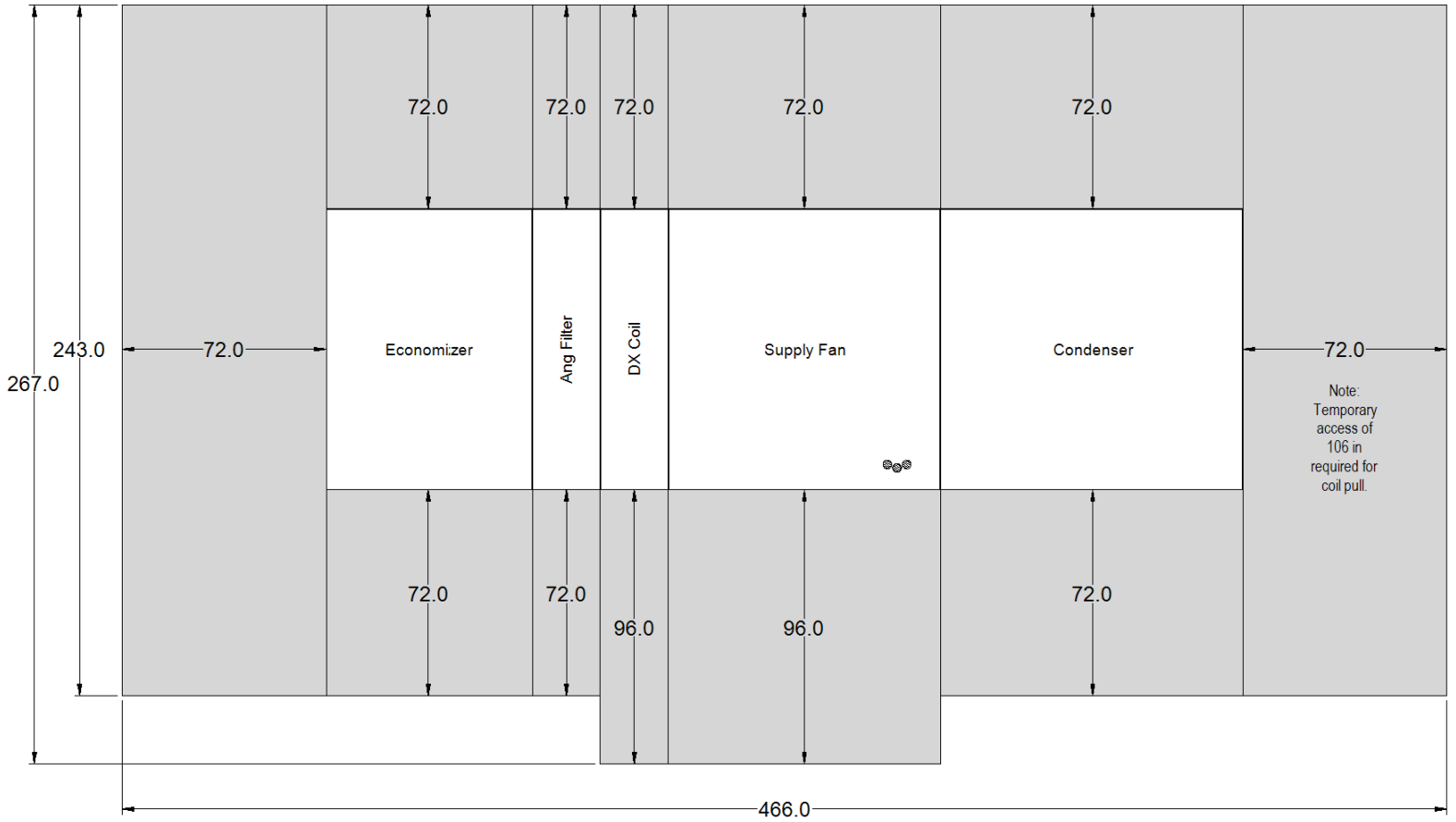
PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



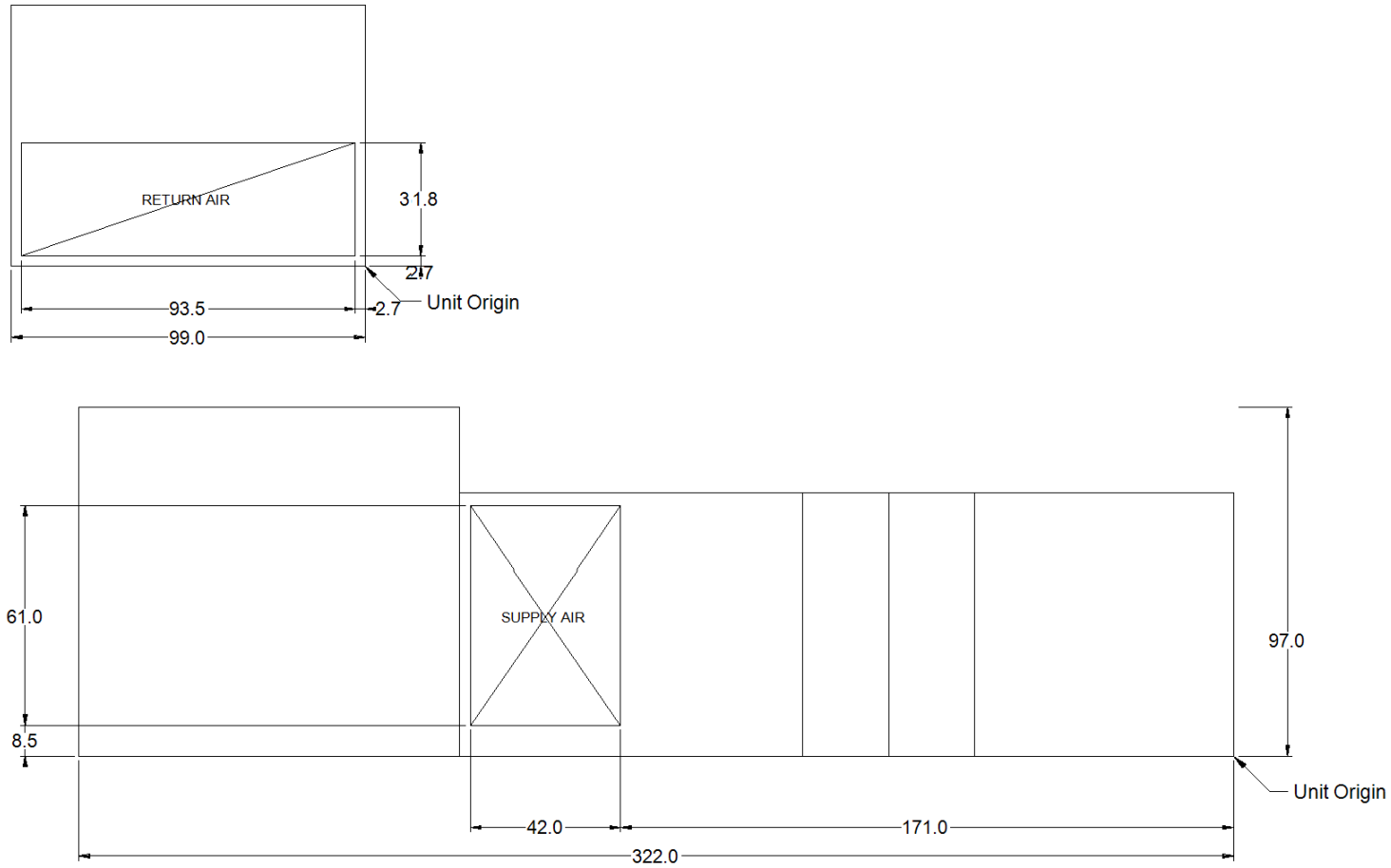
PLAN VIEW - KNOCK OUTS & CENTER-OF-GRAVITY

Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



PLAN VIEW - SERVICE CLEARANCE

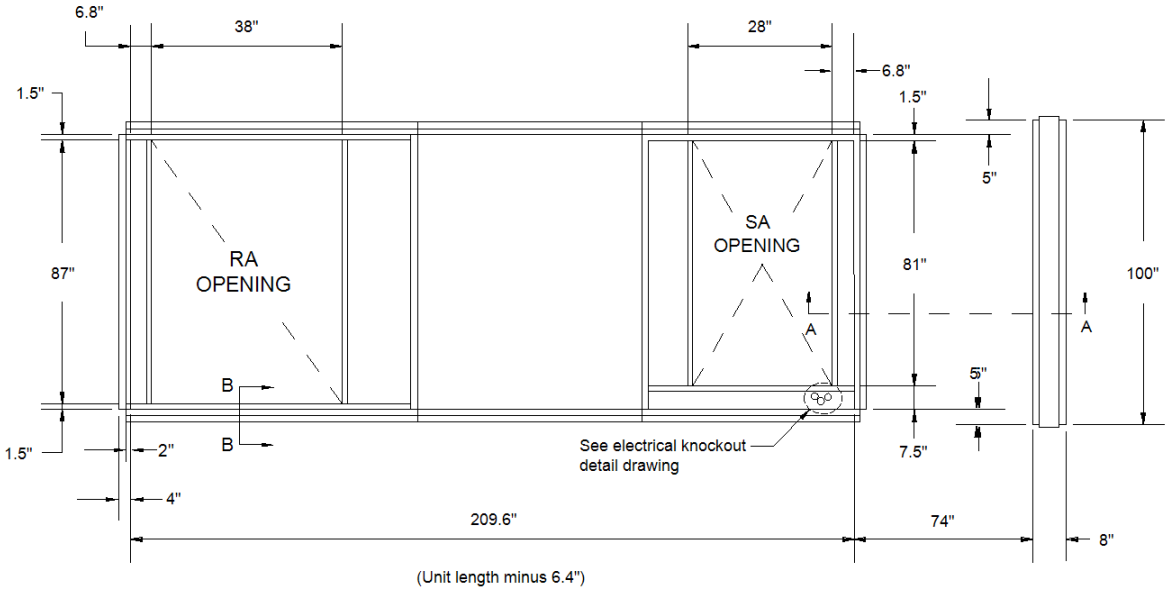
Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



ELEVATION VIEW - UNIT FACE DETAIL

Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

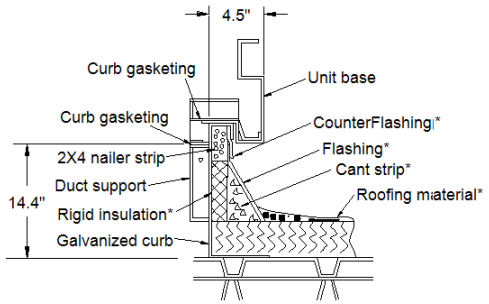
Curb Weight: 614.48 lbs.



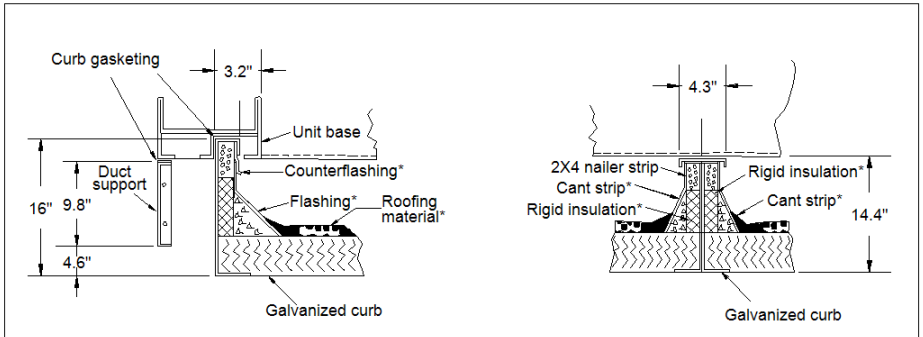
(Unit length minus 6.4")

Note:
Curb must be installed level.

Cross-section B-B

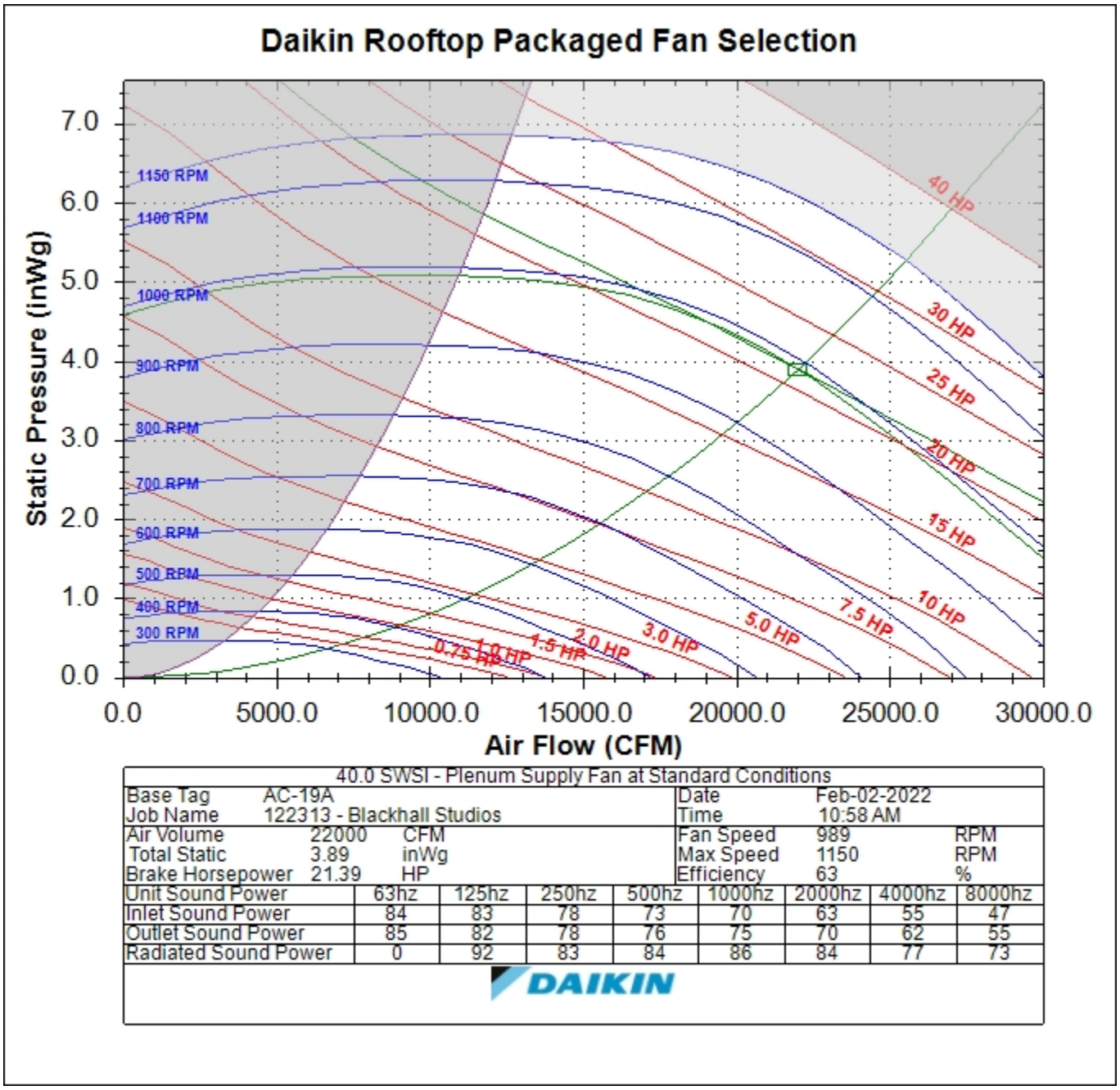


Cross-Section A-A



Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Fan Curve - Supply for AC-19A



40.0 SWSI - Plenum Supply Fan at Standard Conditions

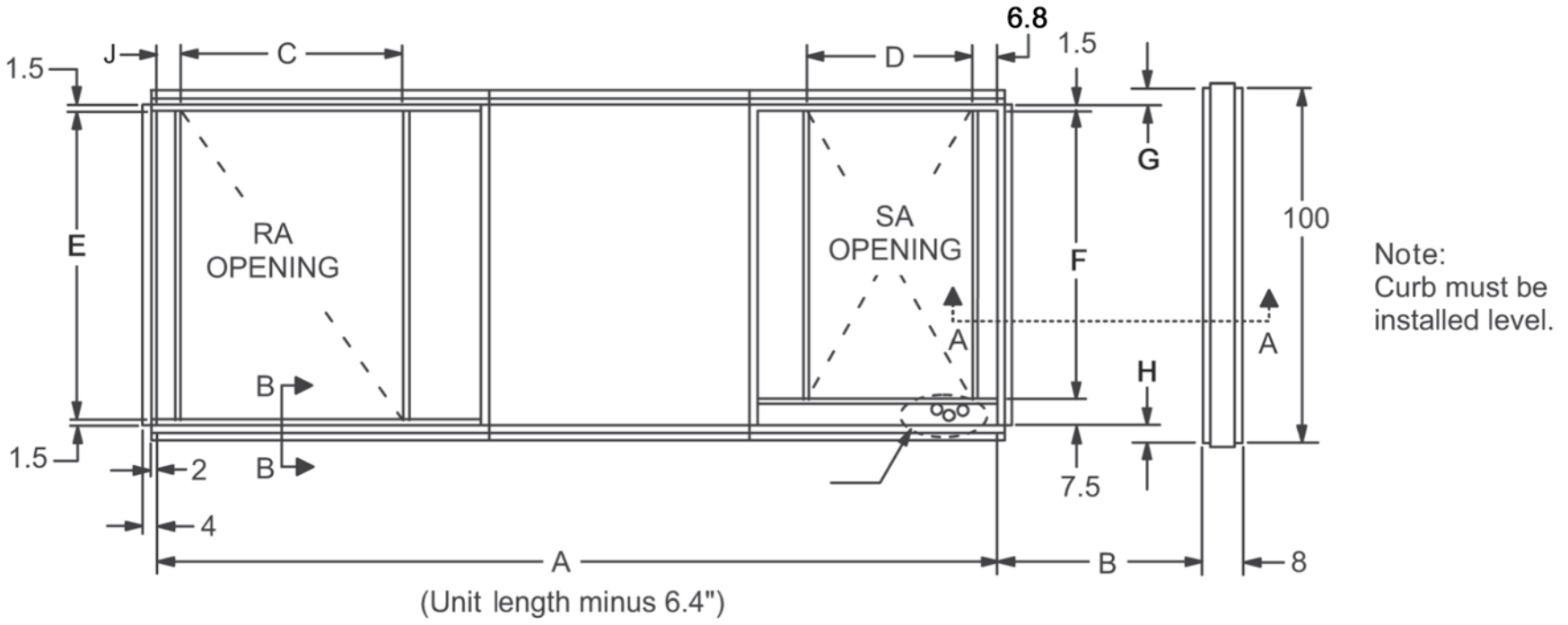
Base Tag	AC-19A		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	22000	CFM	Fan Speed	989	RPM
Total Static	3.89	inWg	Max Speed	1150	RPM
Brake Horsepower	21.39	HP	Efficiency	63	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	84	83	78	73	70	63	55	47
Outlet Sound Power	85	82	78	76	75	70	62	55
Radiated Sound Power	0	92	83	84	86	84	77	73

DAIKIN

Roofcurb Dimensions_Drawing for AC-19A

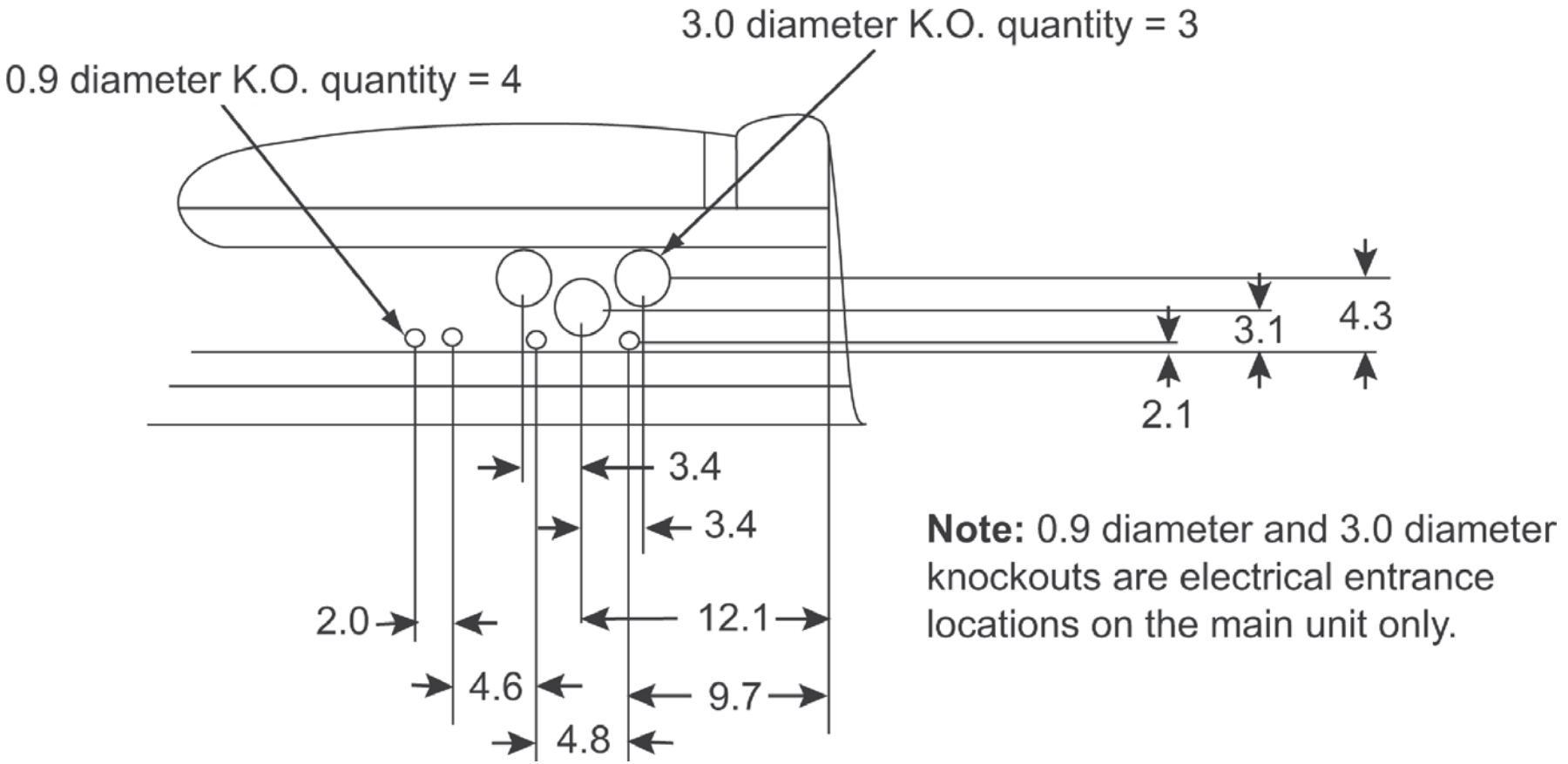
Dimensions		
Description	**Letter**	**Dimensions (in)**
Curb Length	A	209.6
Condenser Rail	B	74.0
Return Air Opening Length	C	38.0
Supply Air Opening Length	D	28.0
Return Air Opening Width	E	87.0
Supply Air Opening Width	F	81.0
Condenser Rail Overhang	G	5.0
Condenser Rail Overhang	H	5.0
Return Air Opening Location	J	6.8



Note:
Curb must be installed level.

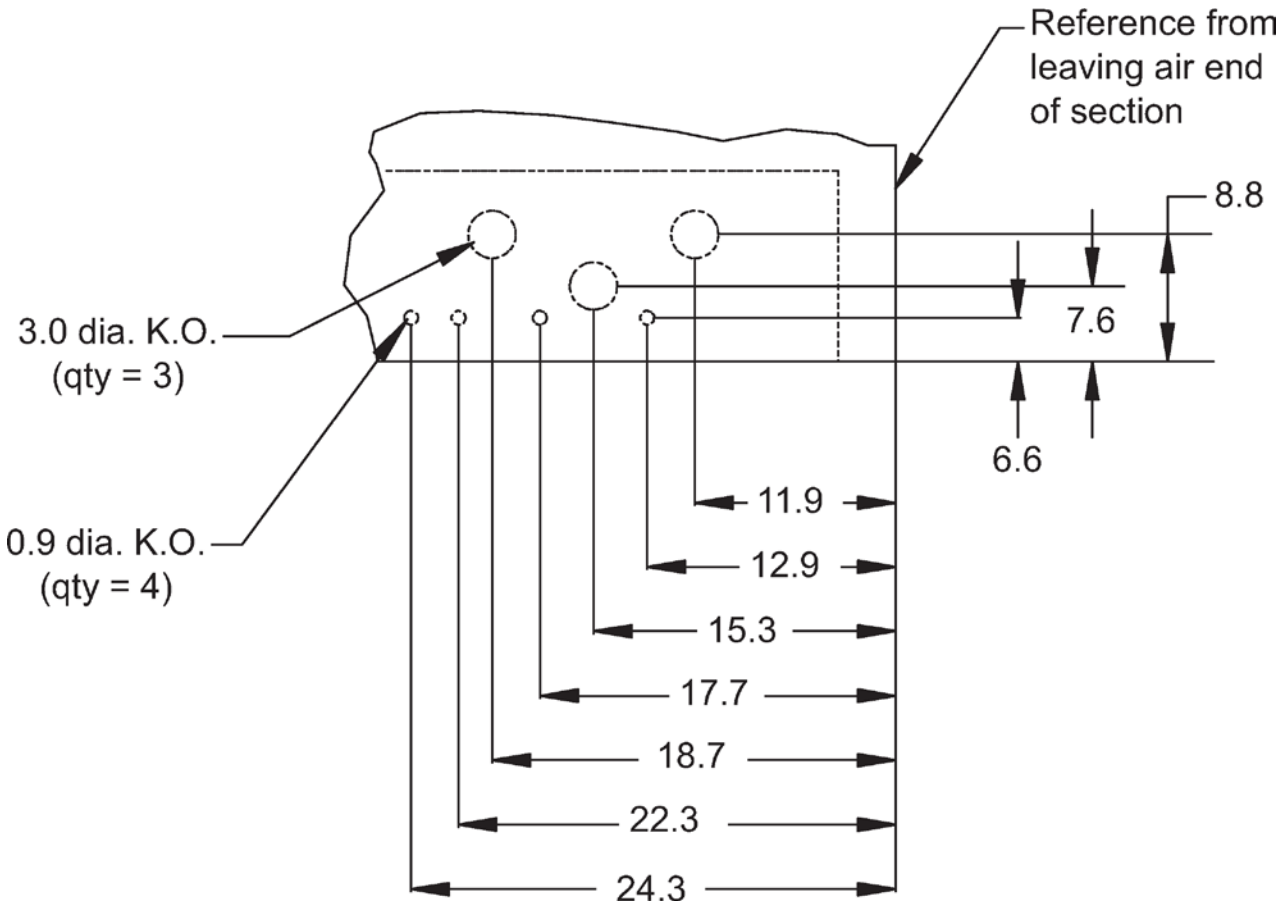
Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: (in)	www.DaikinApplied.com Software Version: 07.91

Roofcurb Knockout medium large box_Drawing for AC-19A



Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Unit Knockout, Large Box_Drawing for AC-19A



Product Drawing	Unit Tag: AC-19A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT071D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Technical Data Sheet for AC-5A,5B

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	07.91
Unit Tag	AC-5A, AC-5B
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RDT081D	460/60/3	726560	10.1	2016 Compliant

Unit

Model Number:	RDT081D
Altitude:	0 ft
Heat Type:	None
Condenser Type:	Air-Cooled
Condenser Sound:	Quiet Condenser Fans
Approval	ETL/MEA-USA unit

Physical

Unit

Length	Height	Width	Weight	Estimated Lifting Lugs
355 in	97.0 in	99.0 in	11907 lb	2 per side

Electrical

Voltage	MCA	MROPD	SCCR
460/60/3	160.6 A	175 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Return/Outside/Exhaust Air

Outside Air Option

Type	Pressure Drop	Damper Actuator
California and90.1 Compliant Economizer	0.13 inH_2O	Electric Actuator

Return Air Option

Return Air Location:	Back

Filter Section

Physical

Type	(Quantity) Height x Width x Depth	Face Area	Face Velocity	Air Pressure Drop
2 in. 85% Nominal Efficiency (MERV 13)	(11) 16 in x 20 in x 2 in (33) 16 in x 25 in x 2 in	116.1 ft^2	206.7 ft/min	0.11 inH_2O

Technical Data Sheet for AC-5A,5B

DX Cooling Coil

Physical

Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material	Casing Material
12	4	53.9 ft²	445.3 ft/min	0.49 inH_2O	Stainless Steel	Stainless Steel

Cooling Performance

Capacity		Refrigerant Type	Indoor Air Temperature				Ambient Air Temperature	
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr		Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F
726560	699450	R410A	74.0	58.3	47.3	46.7	105.0	70.0

Biological Control: UV Light

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation	Fan Efficiency Index
AF SWSI	44 in	Spring	0.648

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower
24000 CFM	3.23 inH_2O	829 rpm	20.54 HP

Motor			Drive
Type	Horsepower	FLA	Type
ODP, Premium Efficiency	25.0 hp	30.0 A	Standard service factor, Fixed drive

Discharge Location: Left Side

Unit Discharge Conditions

AirTemperature

DX coil Configuration: Draw-thru Coil

Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
58670	23.3	49.6	47.4	46.0

Technical Data Sheet for AC-5A,5B

Condensing Section

Compressor

Type	Quantity	Total Power	Capacity Control	Compressor Isolation
Scroll	6	75.5 kW	6 stage	Resilient

Compressor Amps:

Fixed Speed Compressor 1	18.6 A
Fixed Speed Compressor 2	18.6 A
Fixed Speed Compressor 3	18.6 A
Fixed Speed Compressor 4	18.6 A
Fixed Speed Compressor 5	18.6 A
Fixed Speed Compressor 6	18.6 A

Compressor Options:	Refrigeration Service Valves
Piping Options:	Hot gas bypass, circuit 1, 2, Replaceable core filter drier

Condenser Coil

Type	Fins per Inch	Fin Material	Refrigerant Charge
Aluminum tube MicroChannel	18	Aluminum	96.0 lb

Condenser Coil Options:	Build in Hail Protection

Condenser Fan Motors

Number of Motors	Full Load Current (each)
6	1.5 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

EER	IEER	ASHRAE 90.1
10.1	14.4	2016 Compliant

Sound

Sound Power (db)

Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	83	82	77	72	69	62	54	46
Discharge	84	81	77	75	74	69	61	54
Radiated	-	91	82	85	86	85	79	73

Supply Fan Total Pressure Drop Calculation

External Static Pressure:	1.50 inH_2O
Filter:	0.11 inH_2O
Dirty Filter:	1.00 inH_2O
Outside Air:	0.13 inH_2O
DX Coil:	0.49 inH_2O
Total Static Pressure:	3.23 inH_2O

Technical Data Sheet for AC-5A,5B

Options	
Unit	
Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Underliners:	Sheet Metal Underliner - Recommended for rail mounted units
Fan Section Lights:	Supply Fan Section Light
Fan Shaft Grounding:	Fan motors are provided with shaft grounding rings and class H insulation.
Electrical	
Electrical Connection Option:	Single thru door disconnect switch
GFI 115v Receptacle:	Field powered
Power Options:	Phase Failure and Groundfault Protection
Controls	
Application:	Variable Volume - Discharge Air Control
Temperature Control:	DAC, BACNet MSTP communication card
Fan Speed Control:	Factory mounted Inverter
Inverter Manufacturer:	Daikin
Inverter Location:	Inverter(s) in fan section
Airflow Control:	1 duct sensor
Economizer Control:	Outside Air Dry Bulb and Enthalpy Control
Bypass Contactors:	Factory mounted Bypass Contactors
Low Ambient:	Speedtrol, operation to 0 deg F (-18 deg C)

Warranty	
Parts:	Standard 1 year
Compressor:	Extended 4 year, 5 year total

AHRI Certification

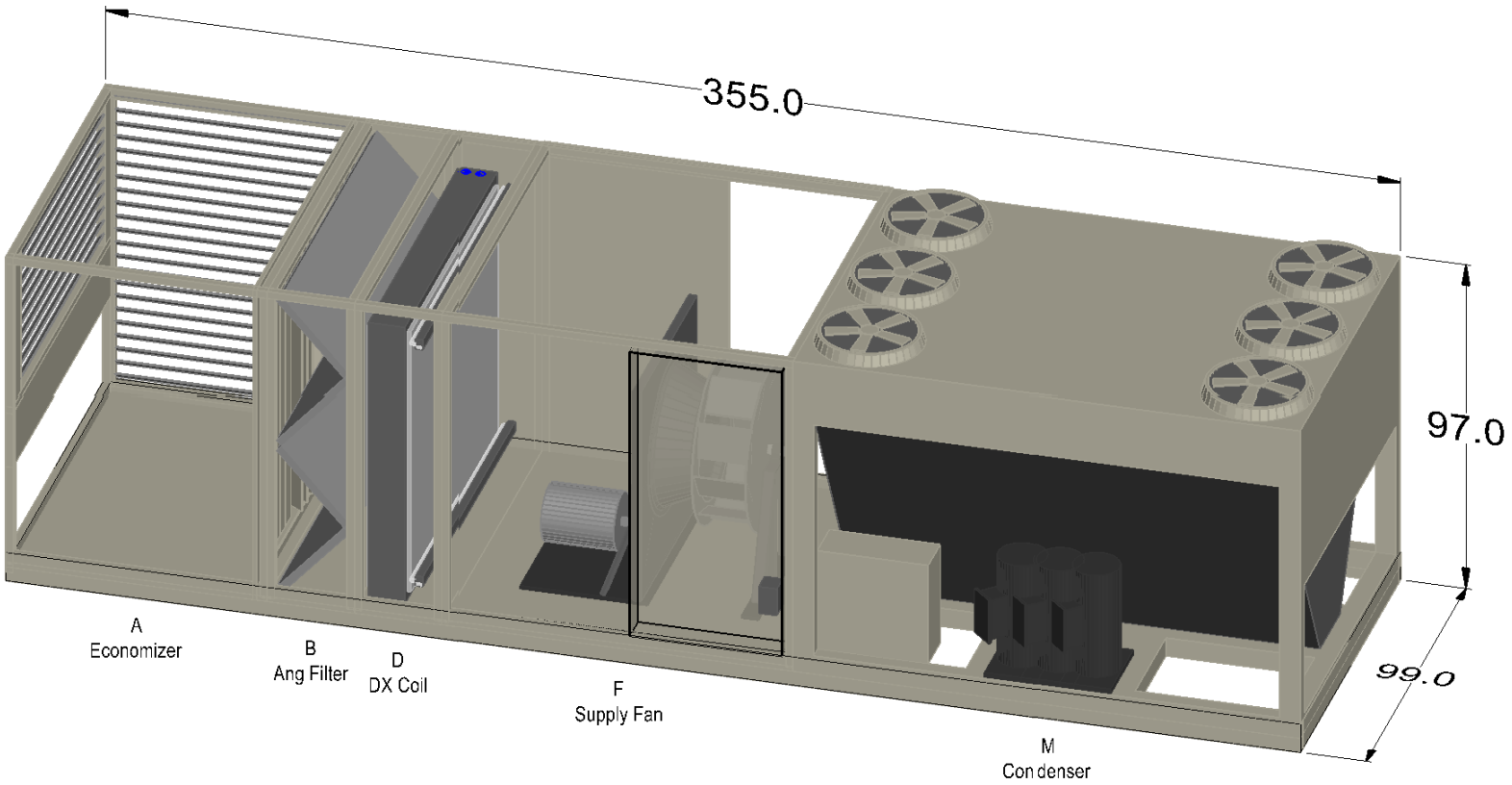
All equipment is rated and certified in accordance with AHRI 360.

Specials	
Unit	
Specials Description:	Provide 65 kAIC rating. Unit is provided with higher than standard SCCR rating and must be marked as a special for processing. Pricing is already accounted for in the item summary. Use FPA# "SCCR" Unit provided with factory wired terminals for Purge Sequence. Unit will be marked as a special for processing . Use FPA# "Purge" if no other specials from Applications. Provide Condensate Overflow alarm for Cooling Coil drain pan. Provide Stainless Steel coil casing on DX coil. Unit will be marked as a special for processing. Use FPA# "SSCasing" if no other specials from Applications Provide a 72" economizer section with reduced return opening. Unit must be marked as a special for processing. Use FPA# "72Econo" if no other specials from Applications.

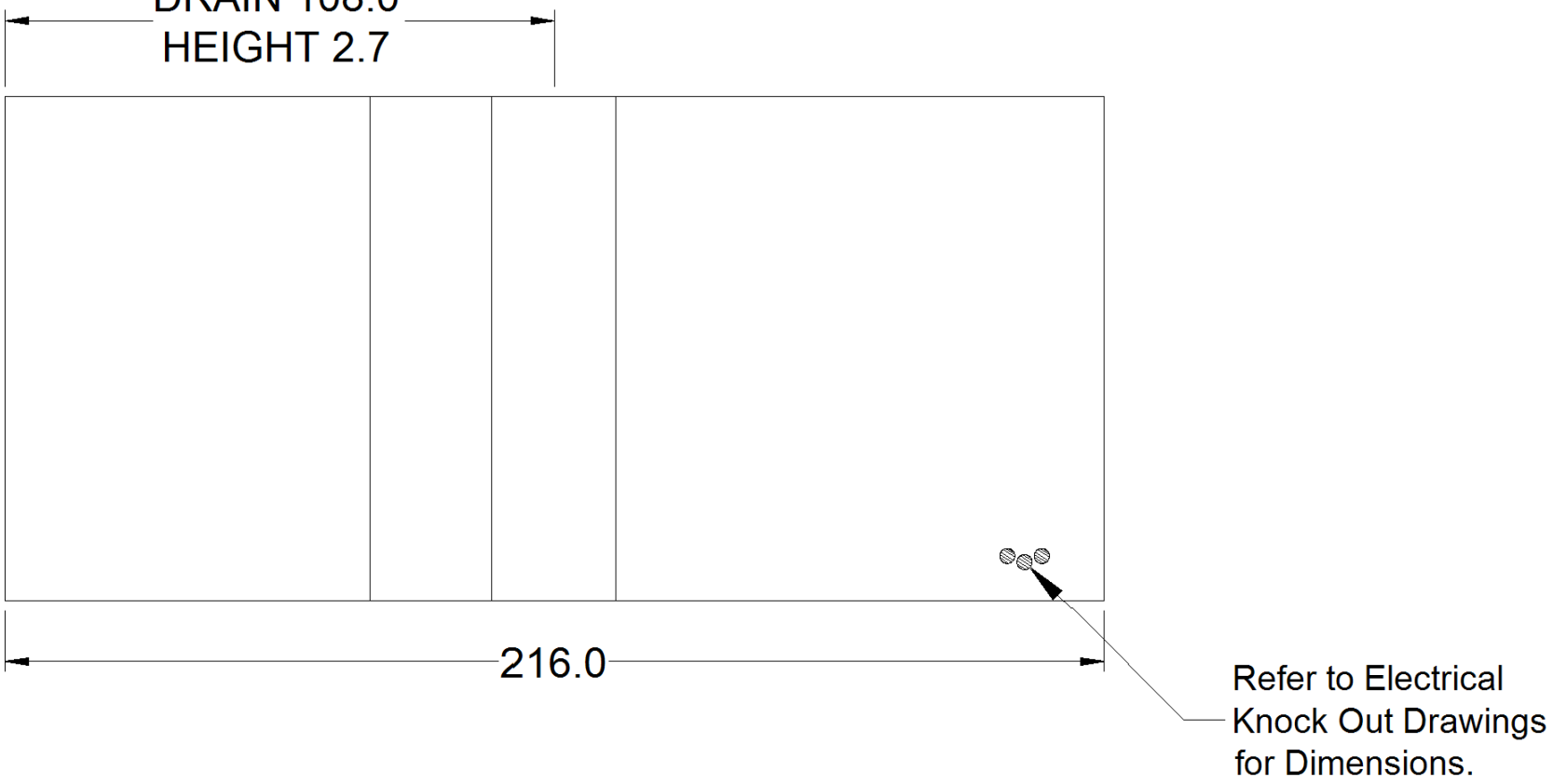
Notes

Unit has been selected with bare condenser coil. Is this application more than 50 miles from the coast?

Drawings(1) for AC-5A,5B

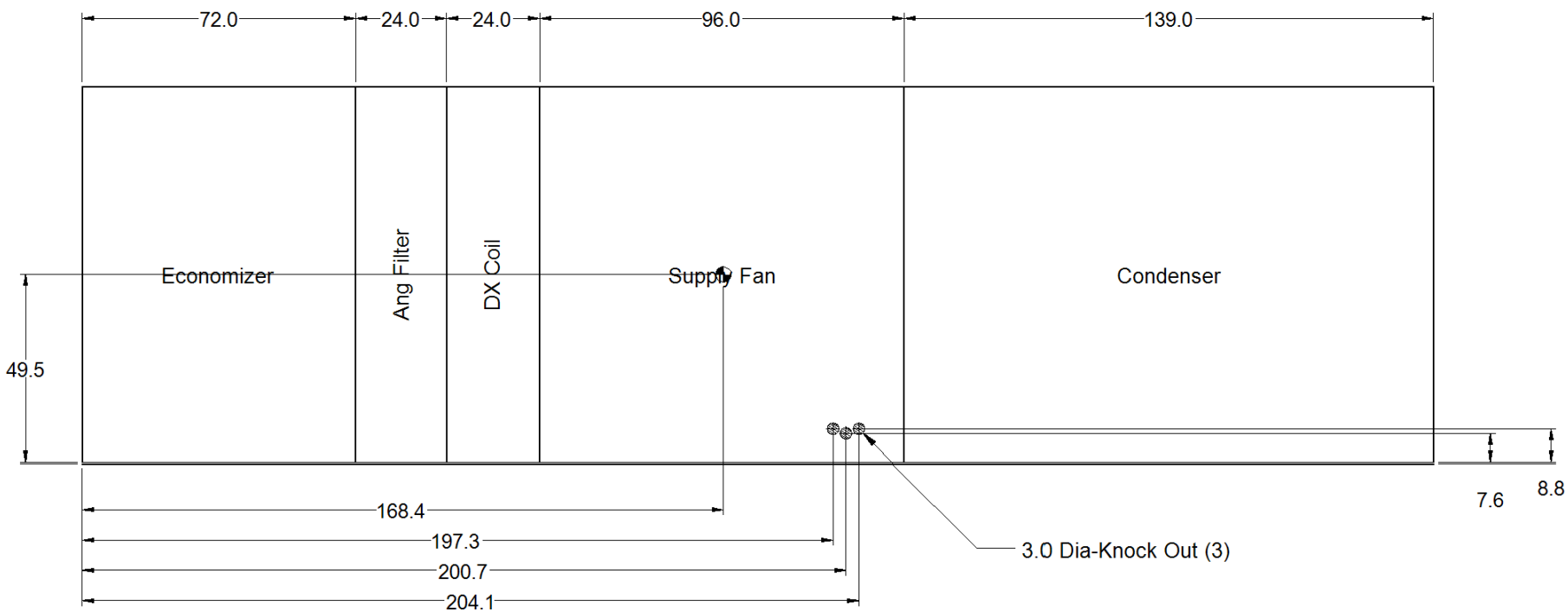


Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



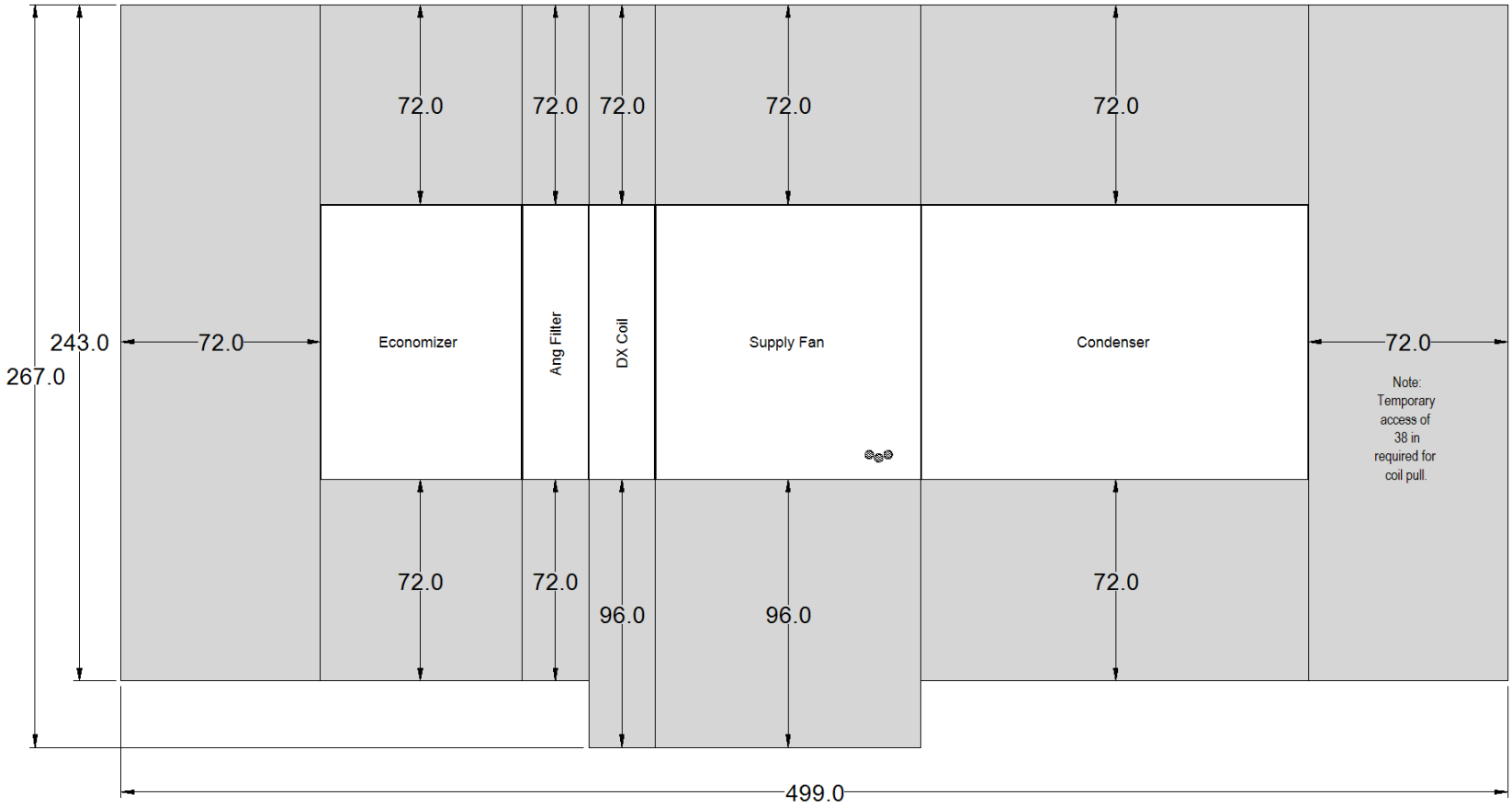
PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25”	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



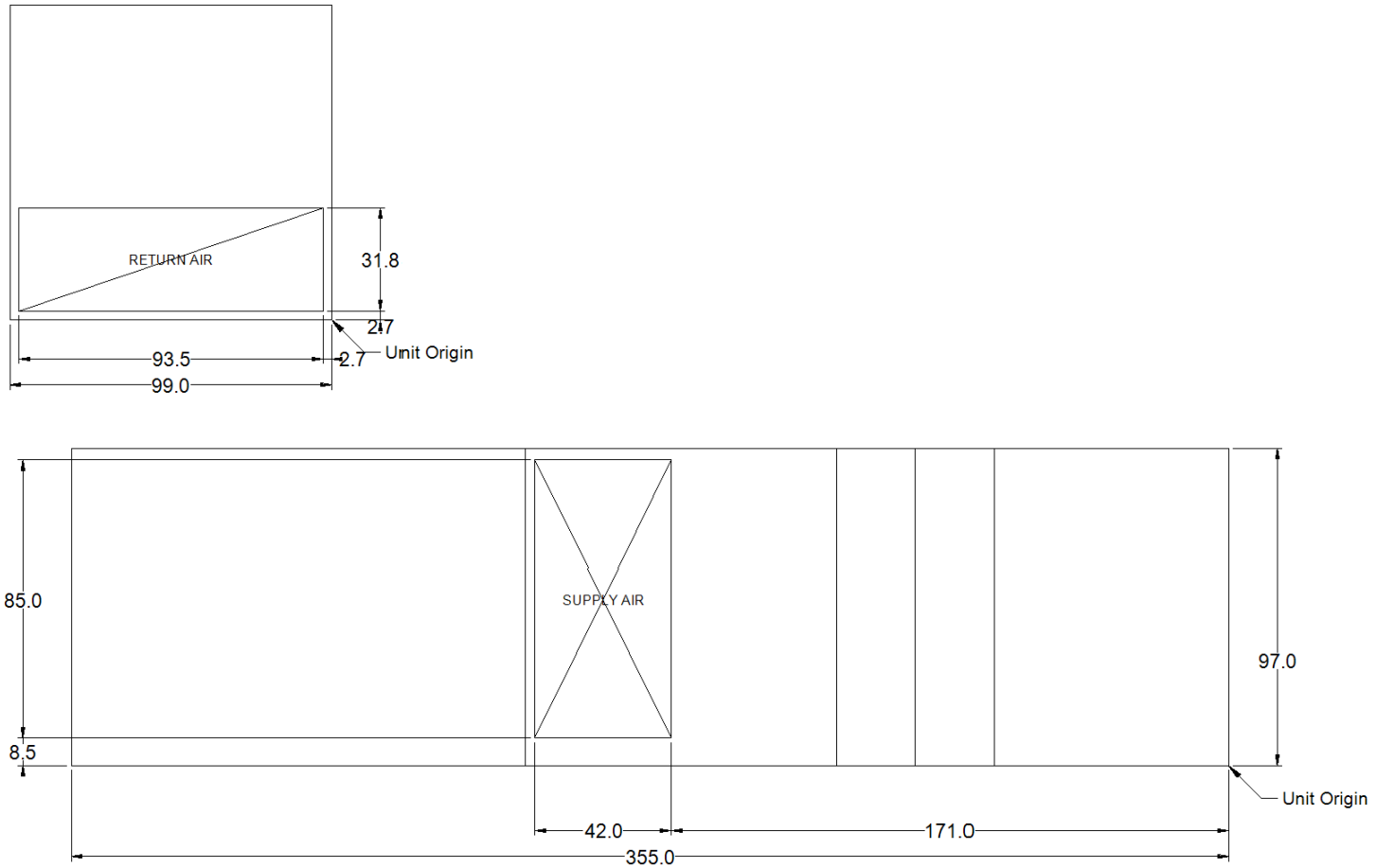
PLAN VIEW - KNOCK OUTS & CENTER-OF-GRAVITY

Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



PLAN VIEW - SERVICE CLEARANCE

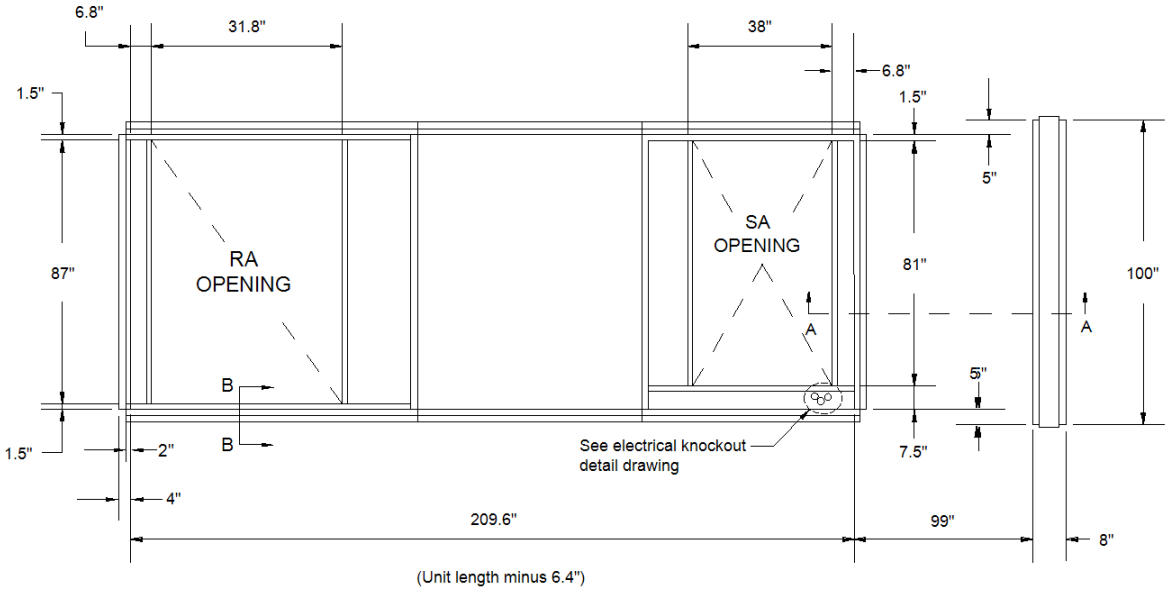
Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



ELEVATION VIEW - UNIT FACE DETAIL

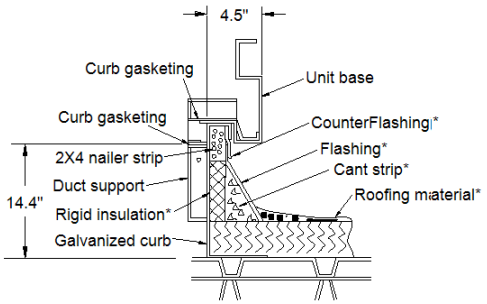
Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Curb Weight: 614.48 lbs.

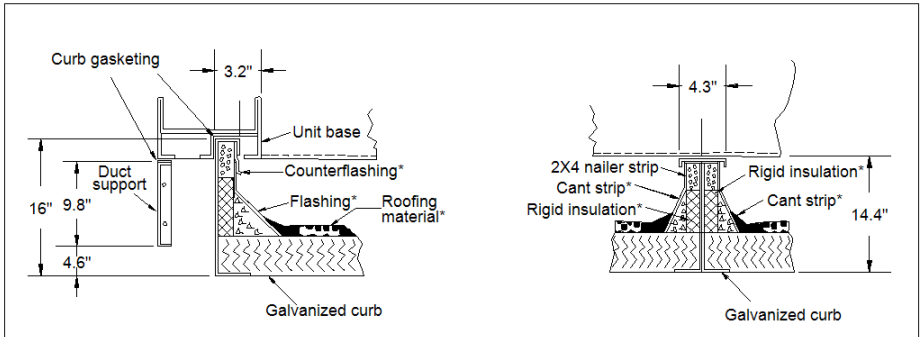


Note:
Curb must be installed level.

Cross-section B-B

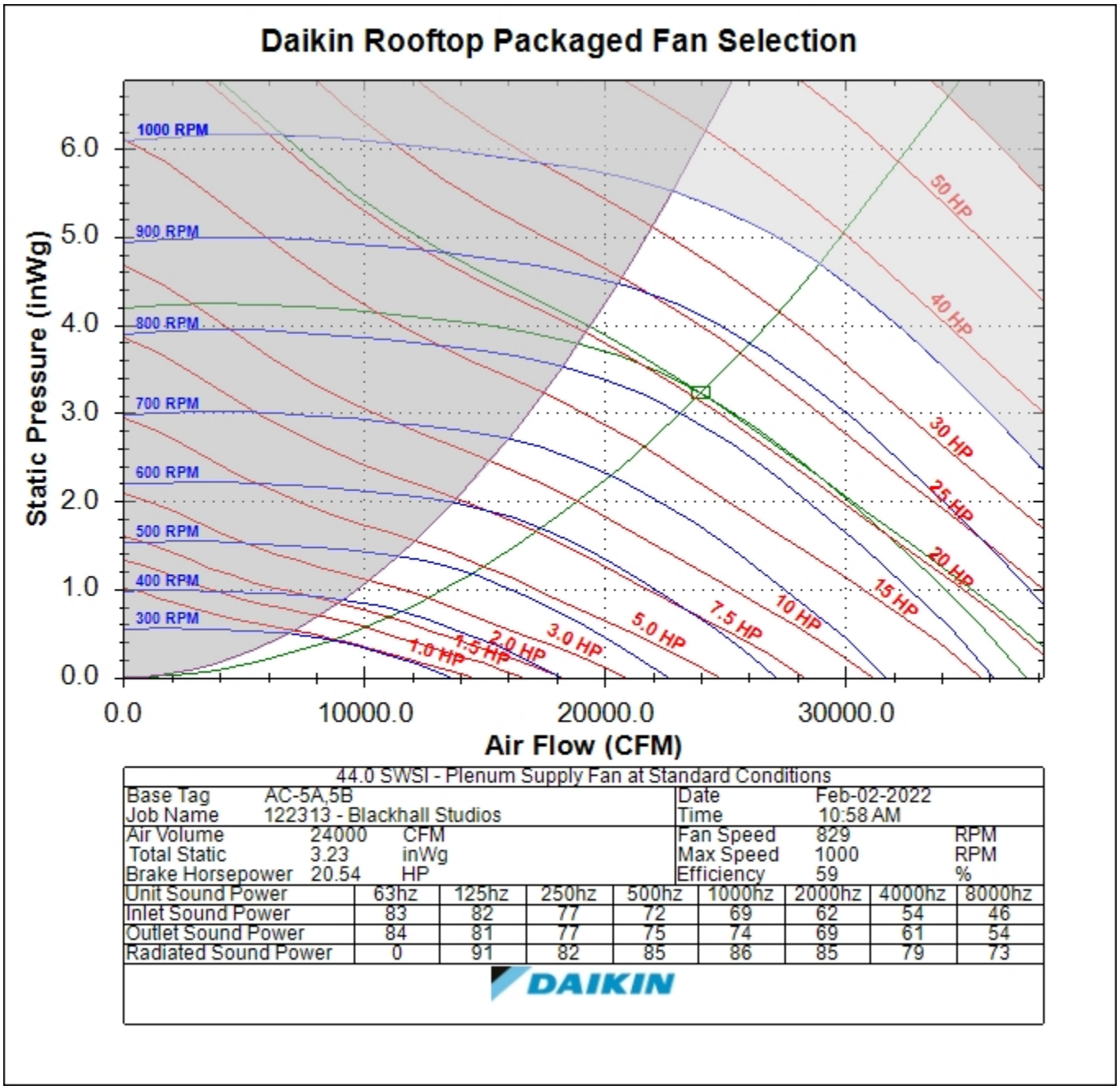


Cross-Section A-A



Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

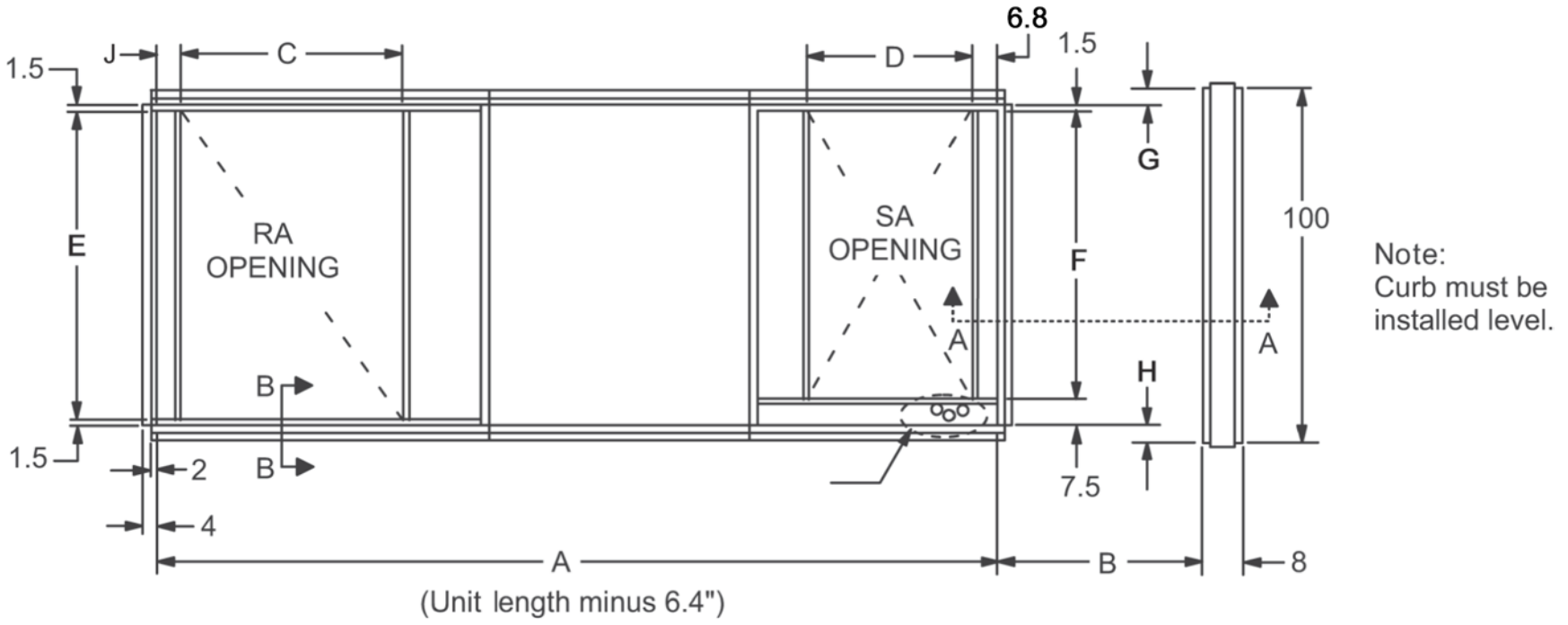
Fan Curve - Supply for AC-5A,5B



44.0 SWSI - Plenum Supply Fan at Standard Conditions								
Base Tag	AC-5A,5B				Date	Feb-02-2022		
Job Name	122313 - Blackhall Studios				Time	10:58 AM		
Air Volume	24000	CFM			Fan Speed	829	RPM	
Total Static	3.23	inWg			Max Speed	1000	RPM	
Brake Horsepower	20.54	HP			Efficiency	59	%	
Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	83	82	77	72	69	62	54	46
Outlet Sound Power	84	81	77	75	74	69	61	54
Radiated Sound Power	0	91	82	85	86	85	79	73

Roofcurb Dimensions_Drawing for AC-5A,5B

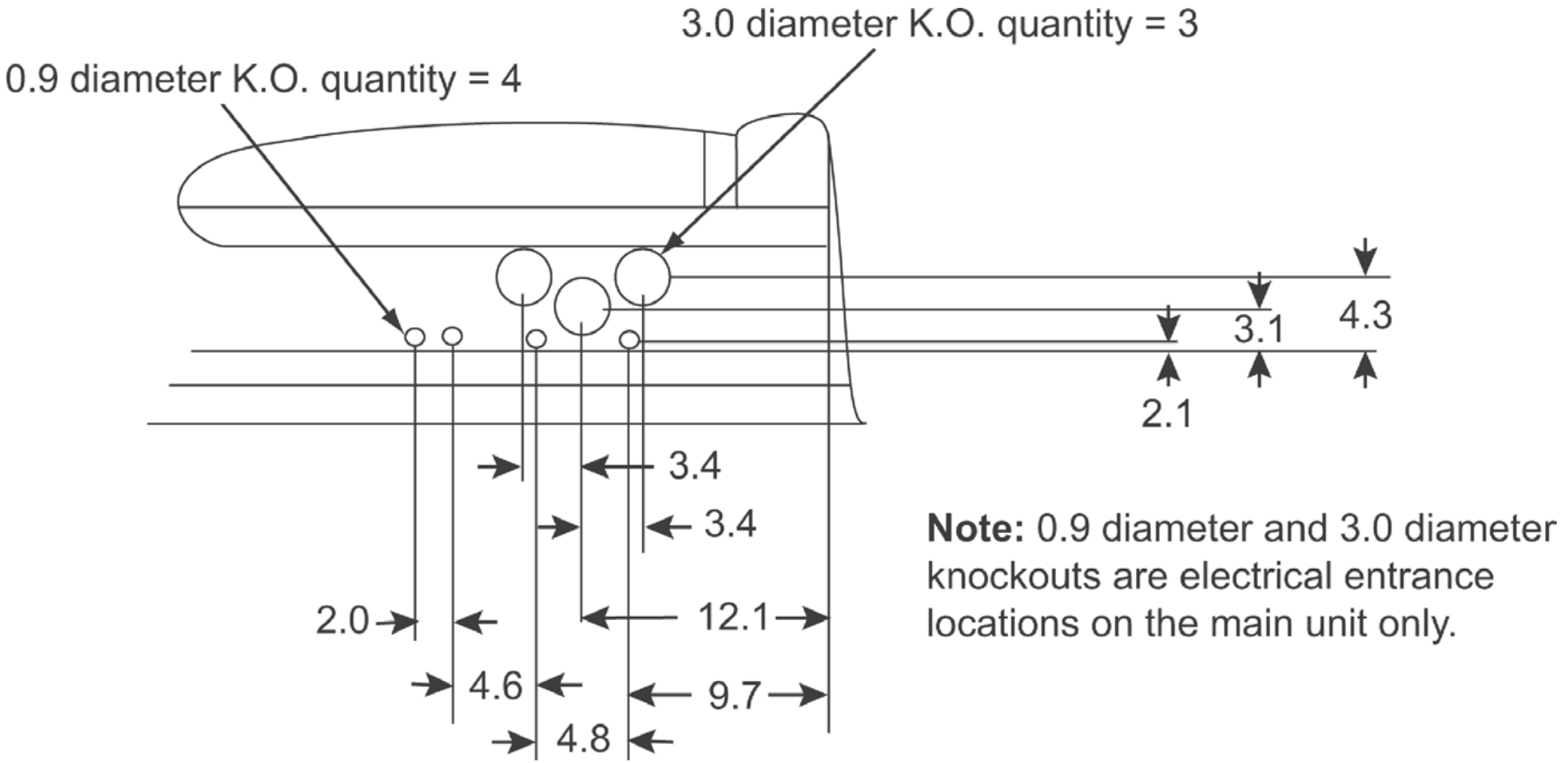
Dimensions		
Description	**Letter**	**Dimensions (in)**
Curb Length	A	209.6
Condenser Rail	B	99.0
Return Air Opening Length	C	31.8
Supply Air Opening Length	D	38.0
Return Air Opening Width	E	87.0
Supply Air Opening Width	F	81.0
Condenser Rail Overhang	G	5.0
Condenser Rail Overhang	H	5.0
Return Air Opening Location	J	6.8



Note:
Curb must be installed level.

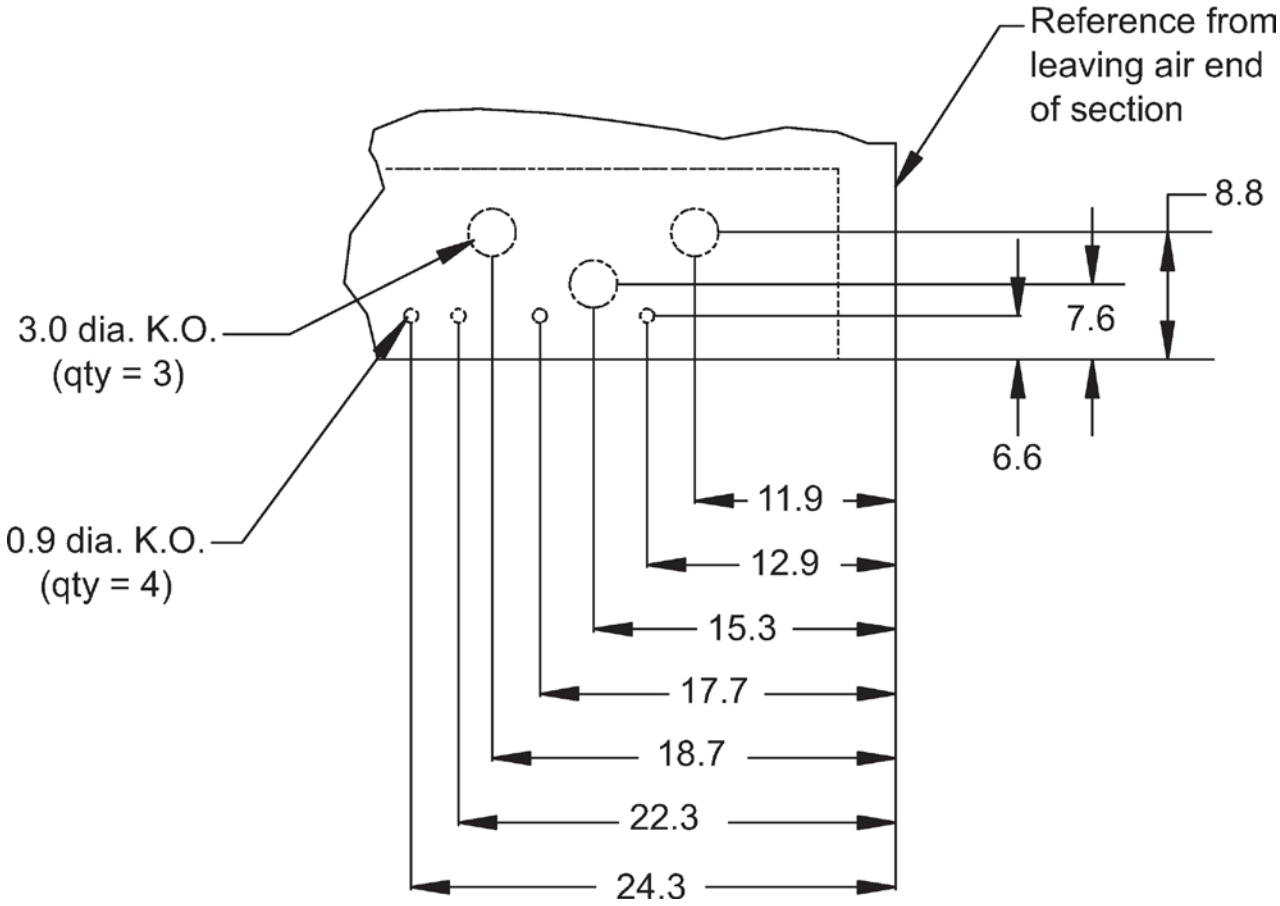
Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: (in)	www.DaikinApplied.com Software Version: 07.91

Roofcurb Knockout medium large box_Drawing for AC-5A,5B



Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

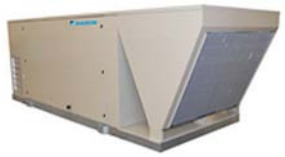
Unit Knockout, Large Box_Drawing for AC-5A,5B



Product Drawing	Unit Tag: AC-5A,5B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT081D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Technical Data Sheet for AC-24A,24B,24C,24D,24E

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	09.70
Unit Tag	AC-24A, AC-24B, AC-24C, AC-24D, AC-24E
FPA#	TBD



Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI360 Standard Efficiency		ASHRAE 90.1-2016 Compliant
			EER	IEER	
DPS025A	460/60/3	277613	10.0	16.7	ASHRAE 90.1-2016 compliant

Unit

Model Number:	DPS025A
Model Type:	Cooling
Heat Type:	Gas
Energy Recovery:	None
Application:	Variable Air Volume, Duct SP Control (Mixed Air or 100% OA)
Controls:	Microtech III
Outside Air:	0-100% Economizer with Drybulb Control
Altitude:	0 ft
Approval	cETLus

Physical

Dimensions and Weight

Length	Height	Width	Weight
162.3 in	82.5in	76.5 in	4050 lb

Corner Weights

L1	L2	L3	L4
874 lb	1278 lb	1128 lb	771 lb

Construction

Exterior	Insulation and Liners	Air Opening Location	
		Return	Supply
Painted Galvanized Steel	2" Injected Foam, R13, Galvanized Steel Liner	Horizontal	Horizontal

Electrical

Unit FLA	MCA	MROPD	SCCR
60.4 A	66.1 A	80 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Technical Data Sheet for AC-24A,24B,24C,24D,24E

Return/Outside/Exhaust Air

Outside Air Option

Type	Damper Pressure Drop	Exhaust Air Type
90.1 and California Title 24 Compliant Economizer	0.21 inH_2O	Powered, Modulating with Building Pressure Control

Exhaust Fan

Type	Drive Type	Wheel Diameter
SWSI AF	Direct Drive	22 in

Motor

(Qty) Horsepower	Type	Efficiency	Full Load Current (Each)
(1) 4.0 HP	ECM	Premium	4.0 A

Performance

Air Flow CFM	External Static Pressure inH_2O	Fan Speed RPM	Brake Horsepower HP
6500	0.50	1315	1.73

Filter Section

Physical

Type	Quantity / Size	Face Area	Face Velocity	Air Pressure Drop
2" MERV 8 & 4" MERV 14 Filters	9 / 18 in x 24 in x 2 in & 9 / 18 in x 24 in x 4 in	27.0 ft^2	240.7 ft/min	0.21

DX Cooling Coil

Physical

Coil Type	Refrigerant Type	Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material
Cu Tube/ Al Fin	R410A	15	4	21.4 ft^2	303.7 ft/min	0.33 inH_2O	Stainless Steel

Cooling Performance

Capacity			Indoor Air Temperature					Ambient air Temperature °F
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr	Moisture Removal lb/h	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dewpoint °F	
277613	190790	74.9	80.3	67.3	53.5	53.4	53.4	105.0

Condensate Connection Size:	1.0 in. Male NPT

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation
SWSI AF	20 in	Spring Isolation

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower	Altitude
6500 CFM	3.1 inH_2O	2224 rpm	6.10 HP	0 ft

Motor				Drive
Type	Horsepower	Efficiency	FLA	Type
Premium Eff Induction Motor	7.5	Premium	9.7 A	Direct Drive

Technical Data Sheet for AC-24A,24B,24C,24D,24E

Gas Heat Section

Physical

Airflow	Max Allowable Burner Temp Rise	Size	Connection (Qty) Size	Heat Exchanger Material
6500 CFM	60.0 °F	300 MBH	(2) 0.75 in. Female NPT	Stainless Steel

Performance

Capacity Btu/hr	Air Temperature Dry Bulb		Air Pressure Drop inH_2O	Gas Pressure		Modulation
	Entering °F	Leaving °F		Minimum inH_2O	Maximum inH_2O	
240000	55.0	89.0	0.58	5	14	Modulating 12:1 Turndown

Note: Two gas connections inside the unit. Single pipe enters unit and splits to two manifolds. Refer to IM 1125 for details on piping.

Unit Discharge Conditions

AirTemperature

Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
17444	74.9	55.9	54.2	53.4

Minimum Airflows

Fan Only Minimum Airflow	Cooling Minimum Airflow	Heating Minimum Airflow
2145 CFM	1605 CFM	3687 CFM

Notes: Refer to fan curve for applicability of approximate airflows

Condensing Section

Compressor

Type	Quantity	Refrigerant Charge lb	Total Power	Capacity Control	Compressor Isolation
Inverter Scroll + Fixed Scroll	2	35.5	22.77 kW	Mod Control with Inverter Compressor	Rubber in Shear

Compressor Amps:

Compressor 1	22.9 A
Compressor 2	18.6 A

Compressor Options: Suction and Discharge Isolation Valves

Condenser Coil

Type	Fins per Inch	Fin Material
Aluminum Microchannel	23	Aluminum

Coil Options: Vandal Guard

Condenser Fan Motors

Number of Motors	Full Load Current (Total)
2	5.2 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

Net Capacity	EER	IEER	ASHRAE 90.1
272000 Btu/hr	10.0	16.7	ASHRAE 90.1-2016 compliant

Technical Data Sheet for AC-24A,24B,24C,24D,24E

Internal Pressure Drop Calculation

External Static Pressure:	1.00 inH_2O
Filter:	0.21 inH_2O
Dirty Filter:	0.50 inH_2O
Outside Air:	0.21 inH_2O
DX Coil:	0.33 inH_2O
Gas Heat:	0.58 inH_2O
Horizontal Discharge:	0.32 inH_2O
Total Static Pressure:	3.13 inH_2O

Sound

	Sound Power (db)							
Frequency	**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1 kHz**	**2 kHz**	**4 kHz**	**8 kHz**
Inlet	81	80	88	80	75	74	69	66
Discharge	87	86	91	86	84	81	76	71
Radiated	51	62	71	73	74	67	61	52

Options

Unit	
Ventilation Controls:	Outdoor Air Monitor
Electrical	
Field Connection:	Fused Disc: 65 kAIC - 208/230/460V: 22 kAIC 575V
Powered Receptacle:	Field powered 115V GFI outlet
Power Options:	Phase Failure Monitor
Controls	
Communication Card:	BACnet/MSTP card, Factory installed

Factory Installed Sensors

- Leaving Coil/Entering Fan Temperature Sensor
- Duct High Limit Switch
- Duct Static Pressure Sensor
- BACnet/MSTP Card
- Return Air Temperature Sensor
- Discharge Air Temperature sensor – Wired in unit, mounted in supply duct
- Outside Air Temperature Sensor
- Dirty Filter On/Off Switch
- Supply Fan Air Proving Via Modbus
- Building Static Pressure Sensor
- Ebtron Airflow Station

Warranty

Parts:	Standard One Year
Compressor:	Additional Four Year, Five Year Total
Gas Heat Exchanger:	Standard one Year

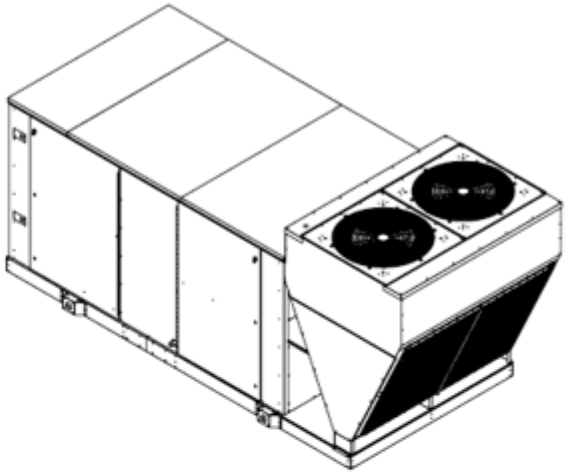
AHRI Certification

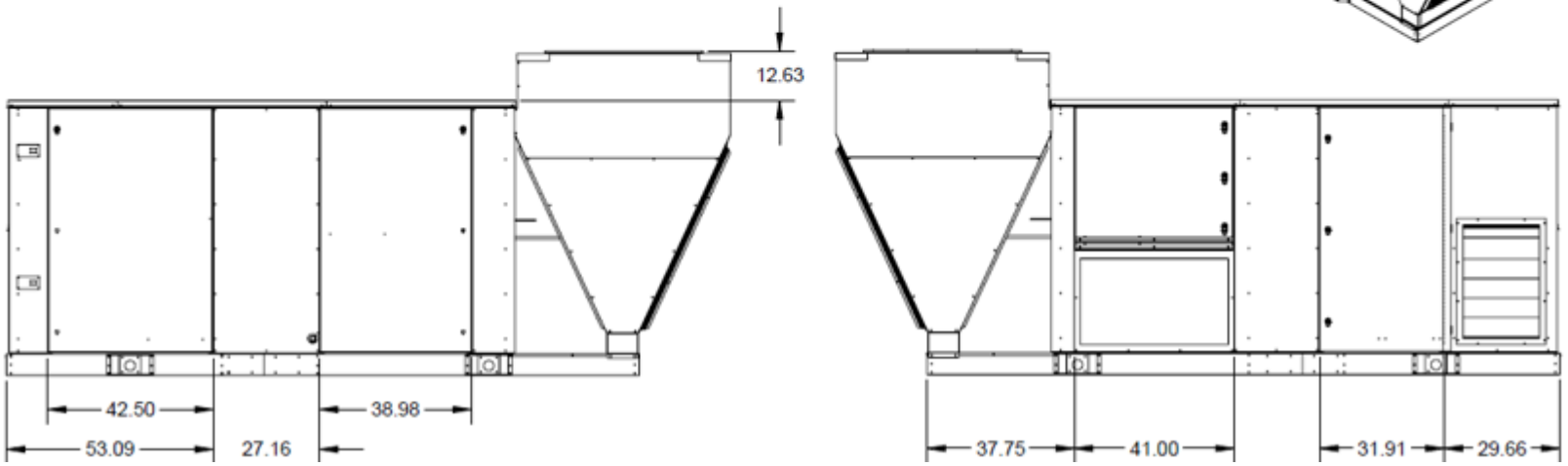
All equipment is rated and certified in accordance with AHRI 360.

Specials

Unit	
Specials Description:	Provide stainless steel indoor coil casing. Use FPA# "Stainless"

Notes



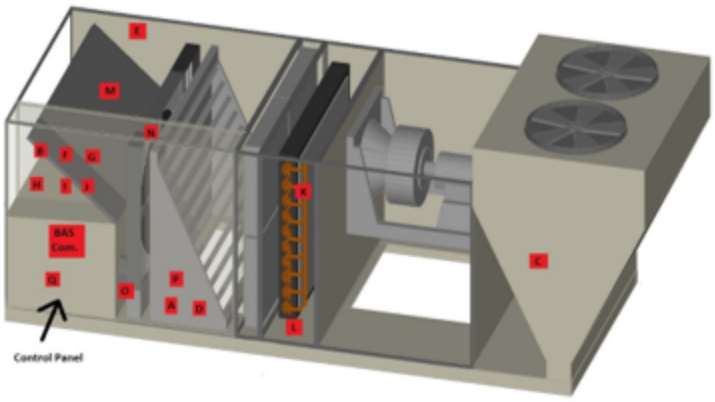


Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS025A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Cabinet C Sensor Locations_Drawing for AC-24A,24B,24C,24D,24E

Rebel 16-28 Tons Factory Installed Sensor Locations [1]



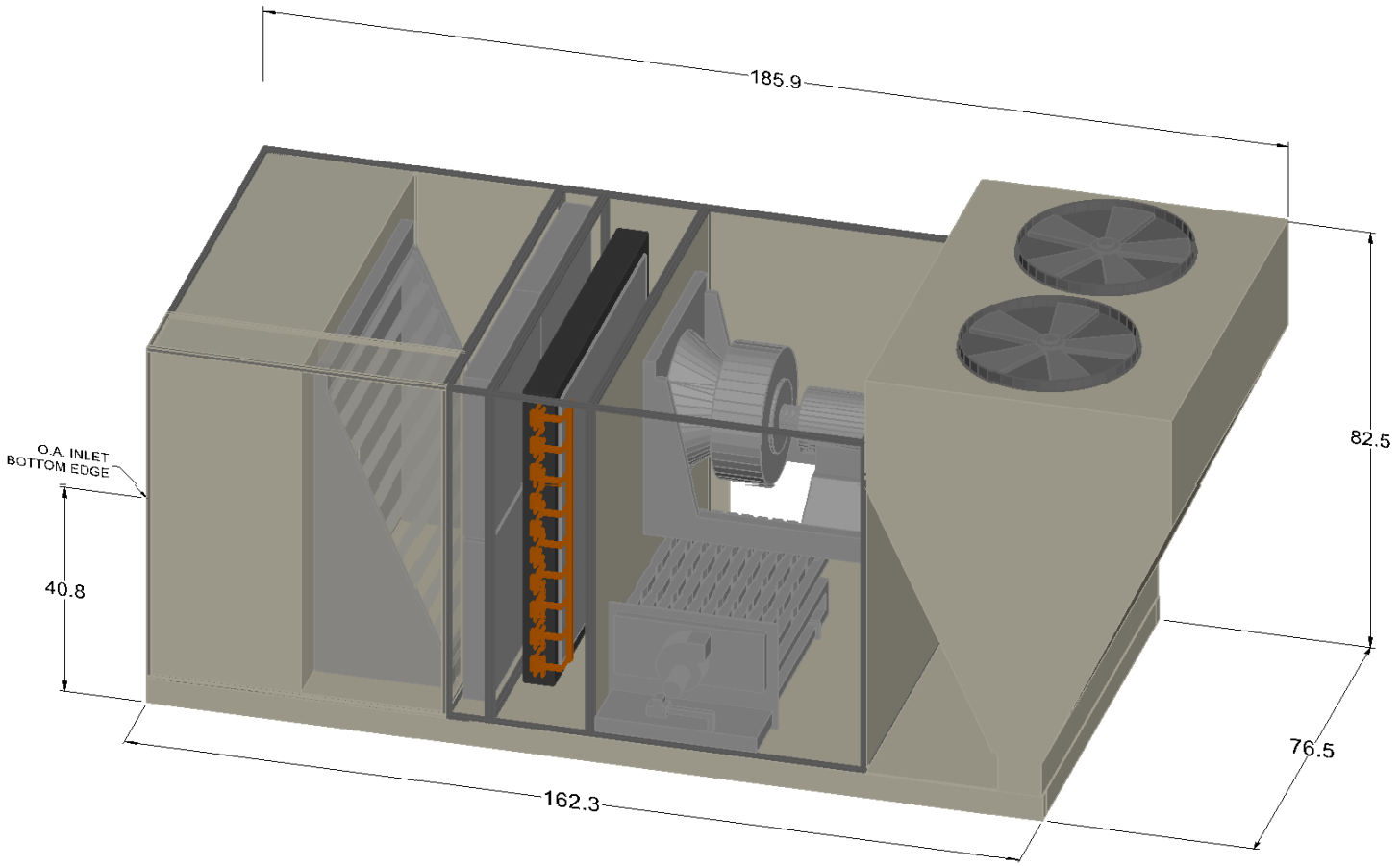
Only applies to units with factory mounted controls

SENSOR DESCRIPTION	LABEL
Return Air Temp Sensor	A
Discharge Air Temp Sensor - Wired in unit, mounted in supply duct	B
Outside Air Temp Sensor	C
Return Air Enthalpy Sensor	D
Outside Air Enthalpy Sensor	E
Dirty Filter On/Off Switch	F
Supply Fan Air Proving via Modbus	G
Duct High Limit Switch	H
Duct Static Pressure Sensor	I
Building static pressure sensor	J
Leaving Coil/Entering Fan Temp Sensor	K
BACnet/IP card	BAS Comm.
LON card	
Daikin Intelligent Systems Card	
DIII Gateway Card (VRV communication)	
Condensate Overflow Switch	L
Ebtron Airflow Station	M
Supply Leaving Wheel Temp Sensor	N
Exhaust Leaving Wheel Temp Sensor	O
Return Air Relative Humidity Sensor	P
Energy Wheel VFD	Q

1) Sensors provided are based on unit selection. Refer to unit specific technical data sheet for selection specific sensor list

Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS025A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com		Software Version: 09.70
Sales Engineer:	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.



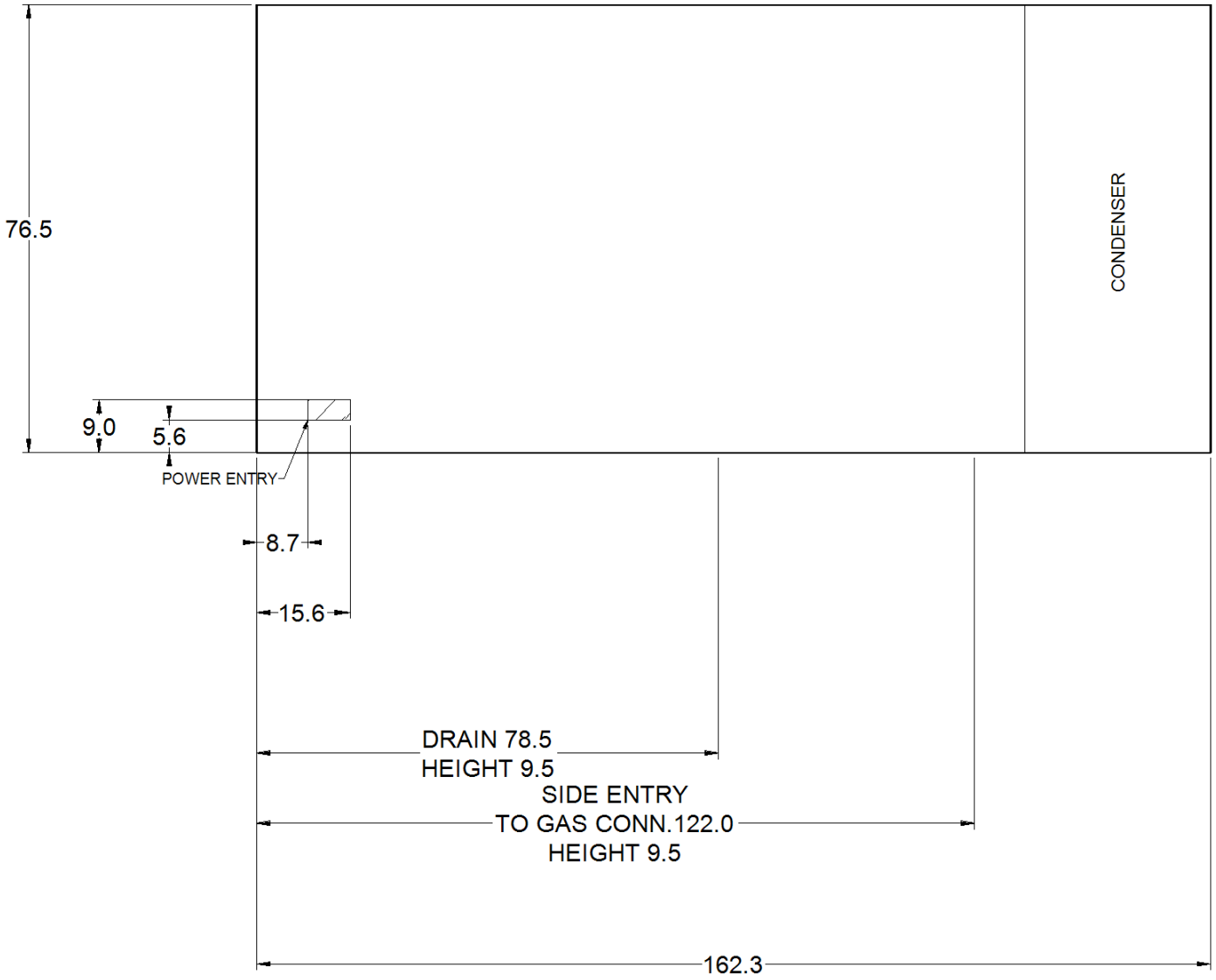
WARNING / AVERTISSEMENT

FOR INSTALLATION ON NON-COMBUSTIBLE FLOORS ONLY	POUR L'INSTALLATION UNIQUEMENT SUR DES SOLS NON COMBUSTILBLES

910209643

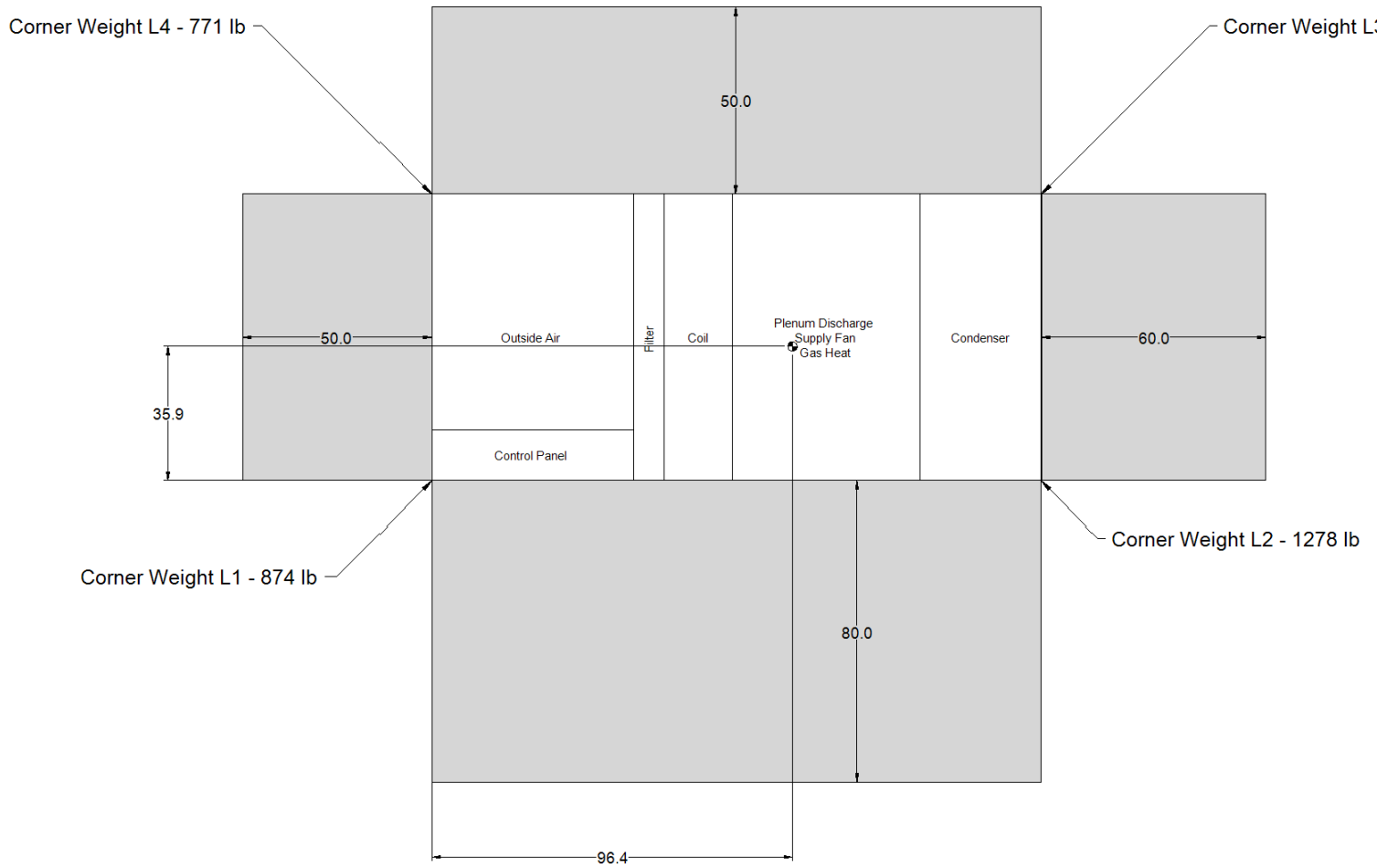
Notes:
(1) Recommended location for optional field cut side power connection.
(2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS025A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70



PLAN VIEW - OPENINGS & OVERALL

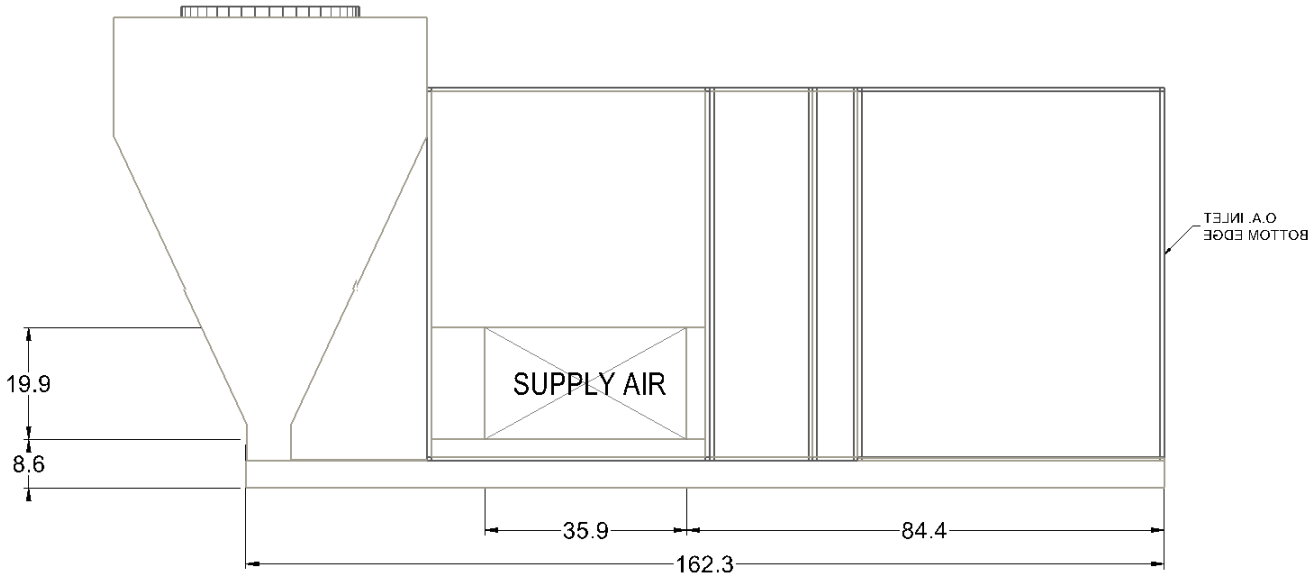
Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS025A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70



PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

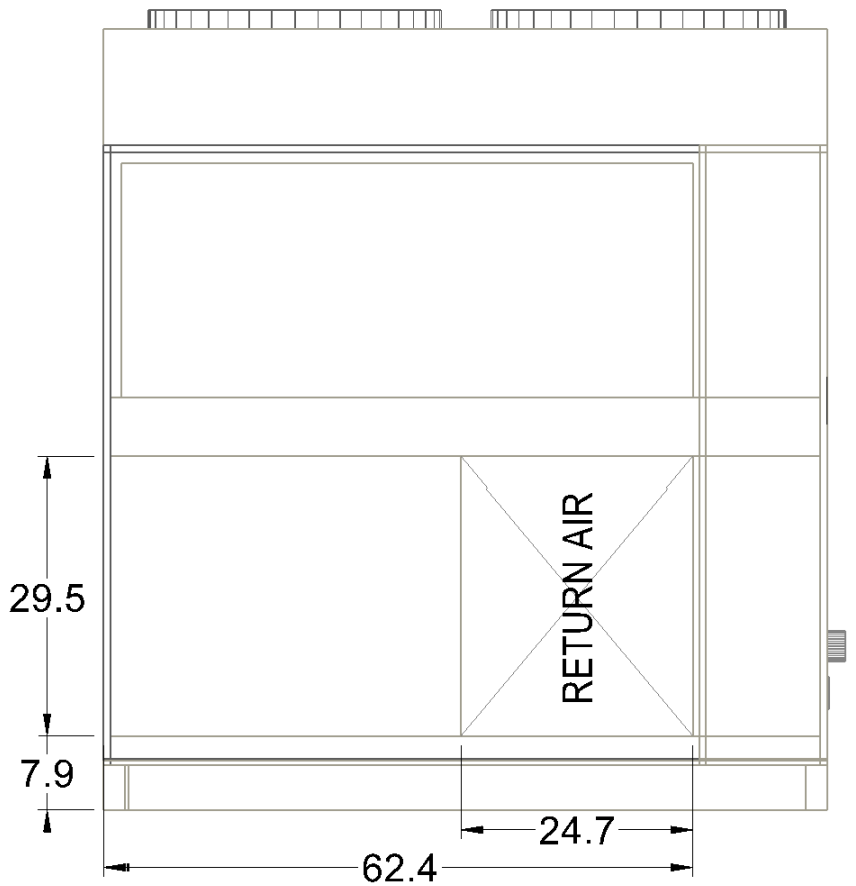
Notes:
(1) Center of Gravity Height = 34.1
(2) Total Weight = 4050 lb

Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS025A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70



ELEVATION VIEW - SUPPLY AIR OPENING LOCATION

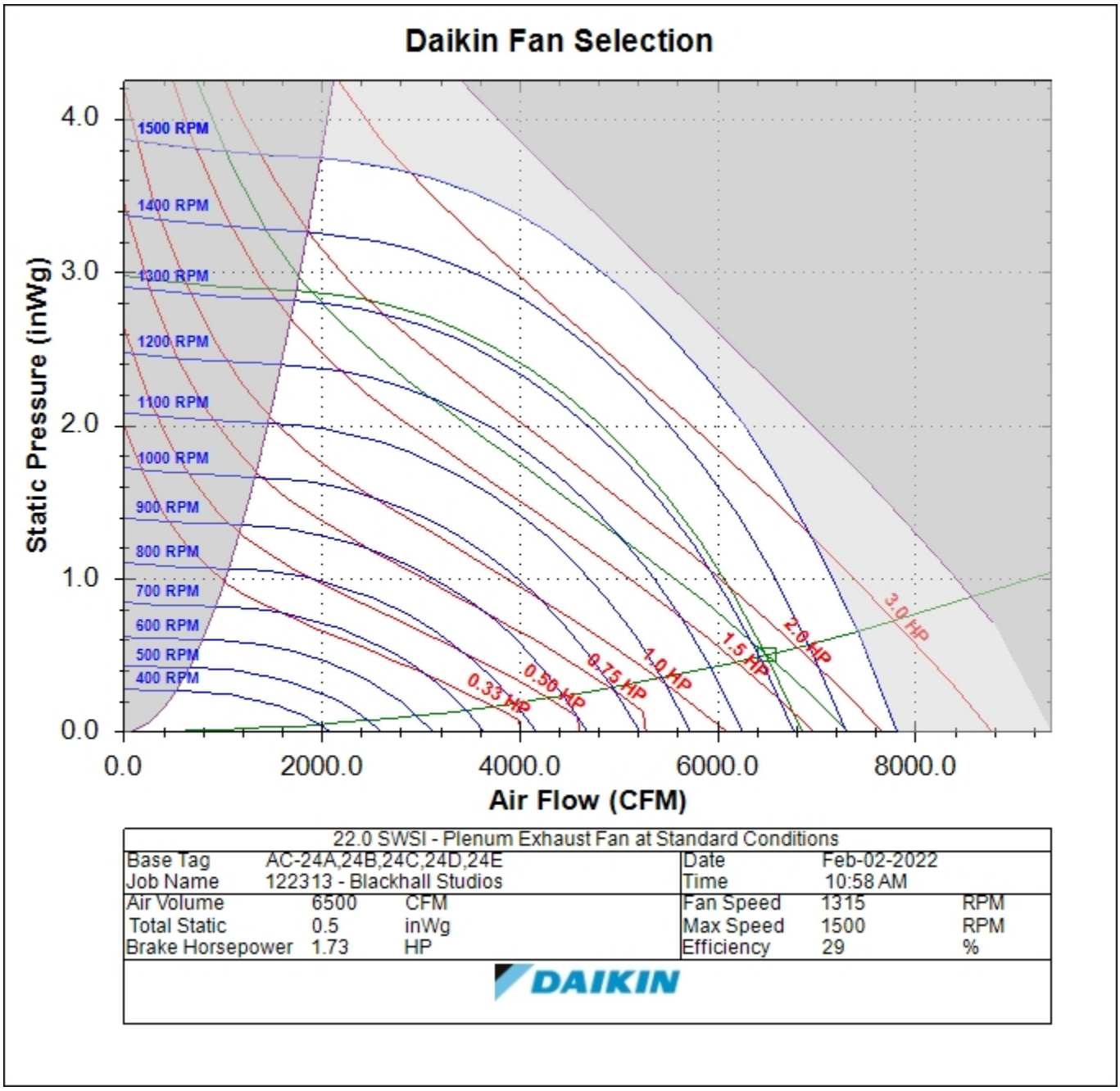
Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS025A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70



ELEVATION VIEW - RETURN AIR OPENING LOCATION

Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS025A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

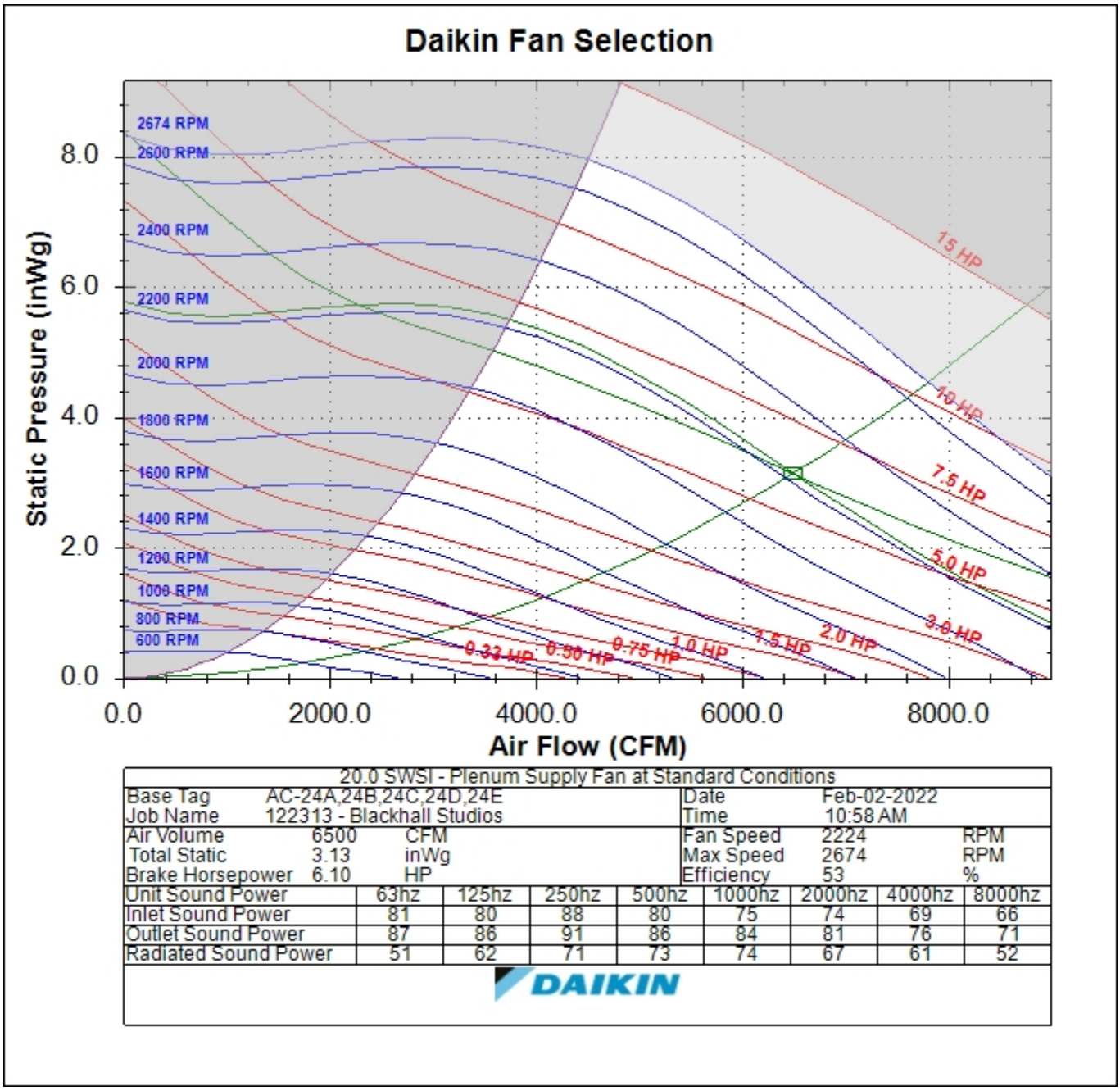
Fan Curve - Exhaust for AC-24A,24B,24C,24D,24E



22.0 SWSI - Plenum Exhaust Fan at Standard Conditions					
Base Tag	AC-24A,24B,24C,24D,24E		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	6500	CFM	Fan Speed	1315	RPM
Total Static	0.5	inWg	Max Speed	1500	RPM
Brake Horsepower	1.73	HP	Efficiency	29	%

DAIKIN

Fan Curve - Supply for AC-24A,24B,24C,24D,24E



20.0 SWSI - Plenum Supply Fan at Standard Conditions

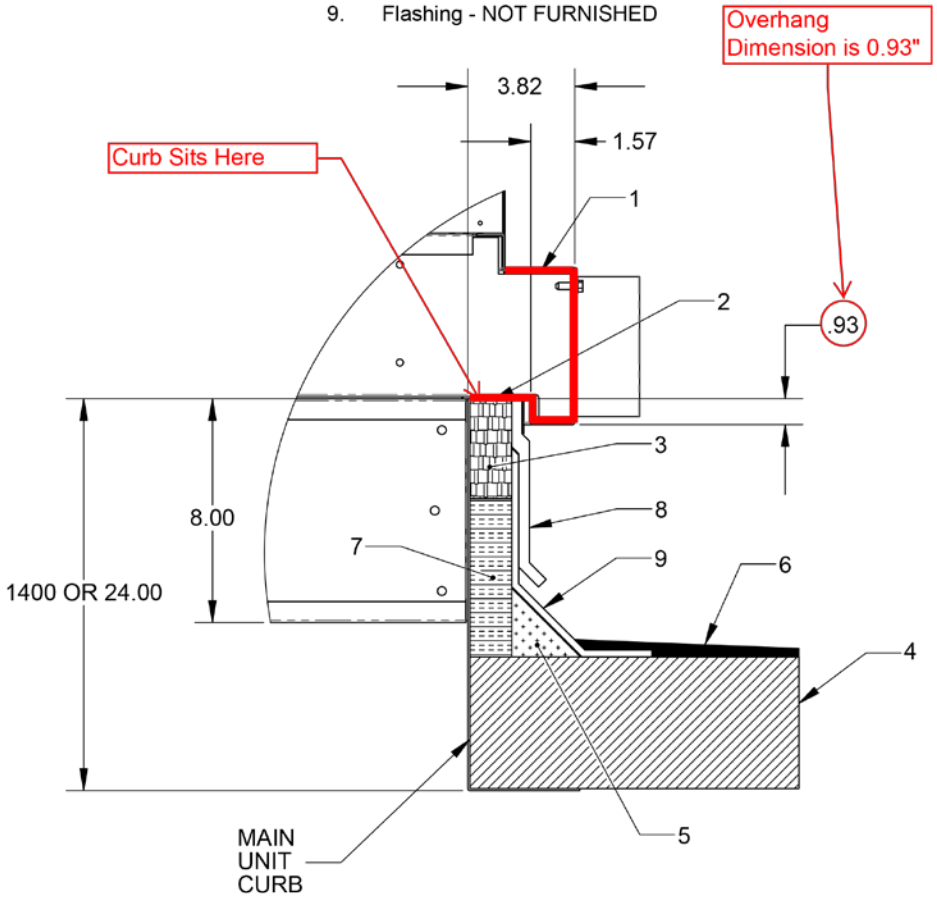
Base Tag	AC-24A,24B,24C,24D,24E		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	6500	CFM	Fan Speed	2224	RPM
Total Static	3.13	inWg	Max Speed	2674	RPM
Brake Horsepower	6.10	HP	Efficiency	53	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	81	80	88	80	75	74	69	66
Outlet Sound Power	87	86	91	86	84	81	76	71
Radiated Sound Power	51	62	71	73	74	67	61	52

DAIKIN

ROOFING DETAIL "A"

1. Unit Base
2. Curb gasketing
3. 2 x 4 nailer strip
4. Galvanized curb
5. Cant strip - NOT FURNISHED
6. Roofing material - NOT FURNISHED
7. Rigid insulation - NOT FURNISHED
8. Counter flashing - NOT FURNISHED
9. Flashing - NOT FURNISHED



Product Drawing	Unit Tag: AC-24A,24B,24C,24D,24E			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS025A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com	Software Version: 09.70	
Sales Engineer:	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Technical Data Sheet for AC-25A,25B

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	09.70
Unit Tag	AC-25A, AC-25B
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI360 Standard Efficiency		ASHRAE 90.1-2016 Compliant
			EER	IEER	
DPS010A	460/60/3	108284	12.1	18.8	ASHRAE 90.1-2016 compliant

Unit

Model Number:	DPS010A
Model Type:	Cooling
Heat Type:	Gas
Hot Gas Reheat:	MHGRH with Field Provided Humidity Sensor
Energy Recovery:	None
Application:	Variable Air Volume, Duct SP Control (Mixed Air or 100% OA)
Controls:	Microtech III
Outside Air:	0-100% Economizer with Drybulb Control
Altitude:	0 ft
Approval	cETLus

Physical

Dimensions and Weight

Length	Height	Width	Weight
91.0 in	56.8in	96.5 in	2513 lb

Corner Weights

L1	L2	L3	L4
410 lb	362 lb	817 lb	924 lb

Construction

Exterior	Insulation and Liners	Air Opening Location	
		Return	Supply
Painted Galvanized Steel	1" Injected Foam, R-7, Galvanized Steel Liner	Bottom	Bottom

Electrical

Unit FLA	MCA	MROPD	SCCR
20.5 A	22.5 A	30 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Technical Data Sheet for AC-25A,25B

Return/Outside/Exhaust Air

Outside Air Option

Type	Damper Pressure Drop	Exhaust Air Type
90.1 and California Title 24 Compliant Economizer	0.06 inH_2O	Powered, Modulating with Building Pressure Control

Exhaust Fan

Type	Drive Type	Wheel Diameter
SWSI AF	Direct Drive	14 in

Motor

(Qty) Horsepower	Type	Efficiency	Full Load Current (Each)
(1) 2.3 HP	ECM	Premium	2.3 A

Performance

Air Flow CFM	External Static Pressure inH_2O	Fan Speed RPM	Brake Horsepower HP
2600	0.50	1930	0.63

Filter Section

Physical

Type	Quantity / Size	Face Area	Face Velocity	Air Pressure Drop
2" MERV 8 & 4" MERV 14 Filters	6 / 18 in x 24 in x 2 in & 6 / 18 in x 24 in x 4 in	18.0 ft^2	144.4 ft/min	0.19

DX Cooling Coil

Physical

Coil Type	Refrigerant Type	Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material
Cu Tube/ Al Fin	R410A	15	4	15.4 ft^2	168.5 ft/min	0.14 inH_2O	Stainless Steel

Cooling Performance

Capacity			Indoor Air Temperature					Ambient air Temperature °F
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr	Moisture Removal lb/h	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dewpoint °F	
108284	74021	29.7	79.5	66.8	53.5	53.1	52.9	105.0

Condensate Connection Size:	3/4 in. Male NPT

Hot Gas Reheat Coil Section

Type	Face Area	Air Pressure Drop	Total Capacity	Leaving Air Temperature	
				Dry Bulb	Wet Bulb
Aluminum Tube Micro-Channel	14.6 ft^2	0.03 inH_2O	46646 Btu/hr	70.0 °F	59.4 °F

Technical Data Sheet for AC-25A,25B

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation
SWSI AF	22 in	None

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower	Altitude
2600 CFM	2.4 inH_2O	1233 rpm	1.74 HP	0 ft

Motor				Drive
Type	**Horsepower**	**Efficiency**	**FLA**	**Type**
ECM Motor	4.0	Premium	4.0 A	Direct Drive

Gas Heat Section

Physical

Airflow	Max Allowable Burner Temp Rise	Size	Connection (Qty) Size	Heat Exchanger Material
2600 CFM	60.0 °F	200 MBH	(1) 0.75 in. Female NPT	Stainless Steel

Performance

Capacity Btu/hr	Air Temperature Dry Bulb		Air Pressure Drop inH_2O	Gas Pressure		Modulation
	Entering °F	Leaving °F		Minimum inH_2O	Maximum inH_2O	
160000	55.0	111.7	0.02	5	14	Modulating 5:1 Turndown

Unit Discharge Conditions

AirTemperature

Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
5456	29.7	55.4	53.8	52.9

Minimum Airflows

Fan Only Minimum Airflow	Cooling Minimum Airflow	Heating Minimum Airflow
858 CFM	1157 CFM	2458 CFM

Notes: Refer to fan curve for applicability of approximate airflows

Condensing Section

Compressor

Type	Quantity	Refrigerant Charge lb	Total Power	Capacity Control	Compressor Isolation
Inverter Scroll + Fixed Scroll	2	25.8	9.09 kW	Mod Control with Inverter Compressor	Rubber in Shear

Compressor Amps:

Compressor 1	4.5 A
Compressor 2	7.9 A

Compressor Options: Suction and Discharge Isolation Valves

Condenser Coil

Type	Fins per Inch	Fin Material
Aluminum Microchannel	23	Aluminum

Coil Options: Vandal Guard

Condenser Fan Motors

Number of Motors	Full Load Current (Total)
2	1.8 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

Net Capacity	EER	IEER	ASHRAE 90.1
121000 Btu/hr	12.1	18.8	ASHRAE 90.1-2016 compliant

Technical Data Sheet for AC-25A,25B

Internal Pressure Drop Calculation

External Static Pressure:	1.50 inH_2O
Filter:	0.19 inH_2O
Dirty Filter:	0.50 inH_2O
Outside Air:	0.06 inH_2O
DX Coil:	0.14 inH_2O
Hot Gas Reheat:	0.03 inH_2O
Gas Heat:	0.02 inH_2O
Total Static Pressure:	2.44 inH_2O

Sound

	Sound Power (db)							
Frequency	**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1 kHz**	**2 kHz**	**4 kHz**	**8 kHz**
Inlet	81	82	78	79	74	71	65	60
Discharge	81	85	81	84	80	77	73	68
Radiated	85	85	81	78	76	71	64	57

Options

Unit	
Ventilation Controls:	Outdoor Air Monitor
Electrical	
Field Connection:	Fused Disc: 65 kAIC - 208/230/460V: 22 kAIC 575V
Powered Receptacle:	Field powered 115V GFI outlet
Power Options:	Phase Failure Monitor
Controls	
Communication Card:	BACnet/MSTP card, Factory installed

Factory Installed Sensors

- Leaving Coil/Entering Fan Temperature Sensor
- Duct High Limit Switch
- Duct Static Pressure Sensor
- BACnet/MSTP Card
- Return Air Temperature Sensor
- Discharge Air Temperature sensor – Wired in unit, mounted in supply duct
- Outside Air Temperature Sensor
- Dirty Filter On/Off Switch
- Supply Fan Air Proving Via Modbus
- Building Static Pressure Sensor
- Ebtron Airflow Station

Warranty

Parts:	Standard One Year
Compressor:	Additional Four Year, Five Year Total
Gas Heat Exchanger:	Standard one Year

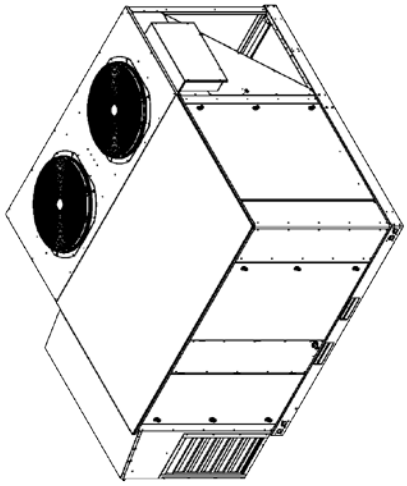
AHRI Certification

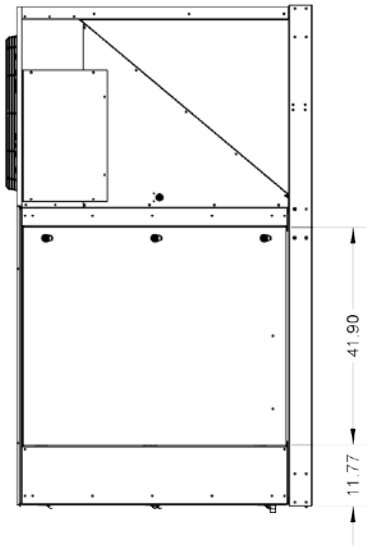
All equipment is rated and certified in accordance with AHRI 360.

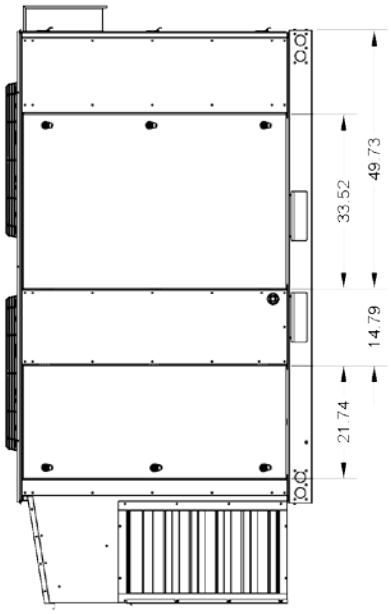
Specials

Unit	
Specials Description:	Provide stainless steel indoor coil casing. Use FPA# "Stainless"

Notes





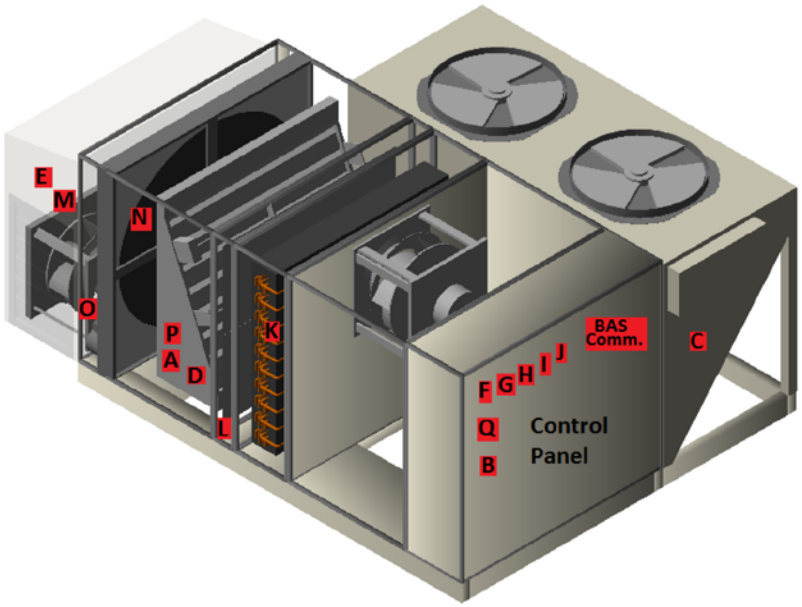


Product Drawing	Unit Tag: AC-25A,25B		Sales Office: Norman S. Wright-Climatec Mechl Equip			
Product:	Project Name: 122313 - Blackhall Studios		Sales Engineer:			
Model: DPS010A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]

DAIKIN
13600 Industrial Park Blvd. Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 09.70

Cabinet AB Sensor Locations_Drawing for AC-25A,25B

Rebel 3-15 Tons Factory Installed Sensor Locations[1]



Only applies to units with factory mounted controls

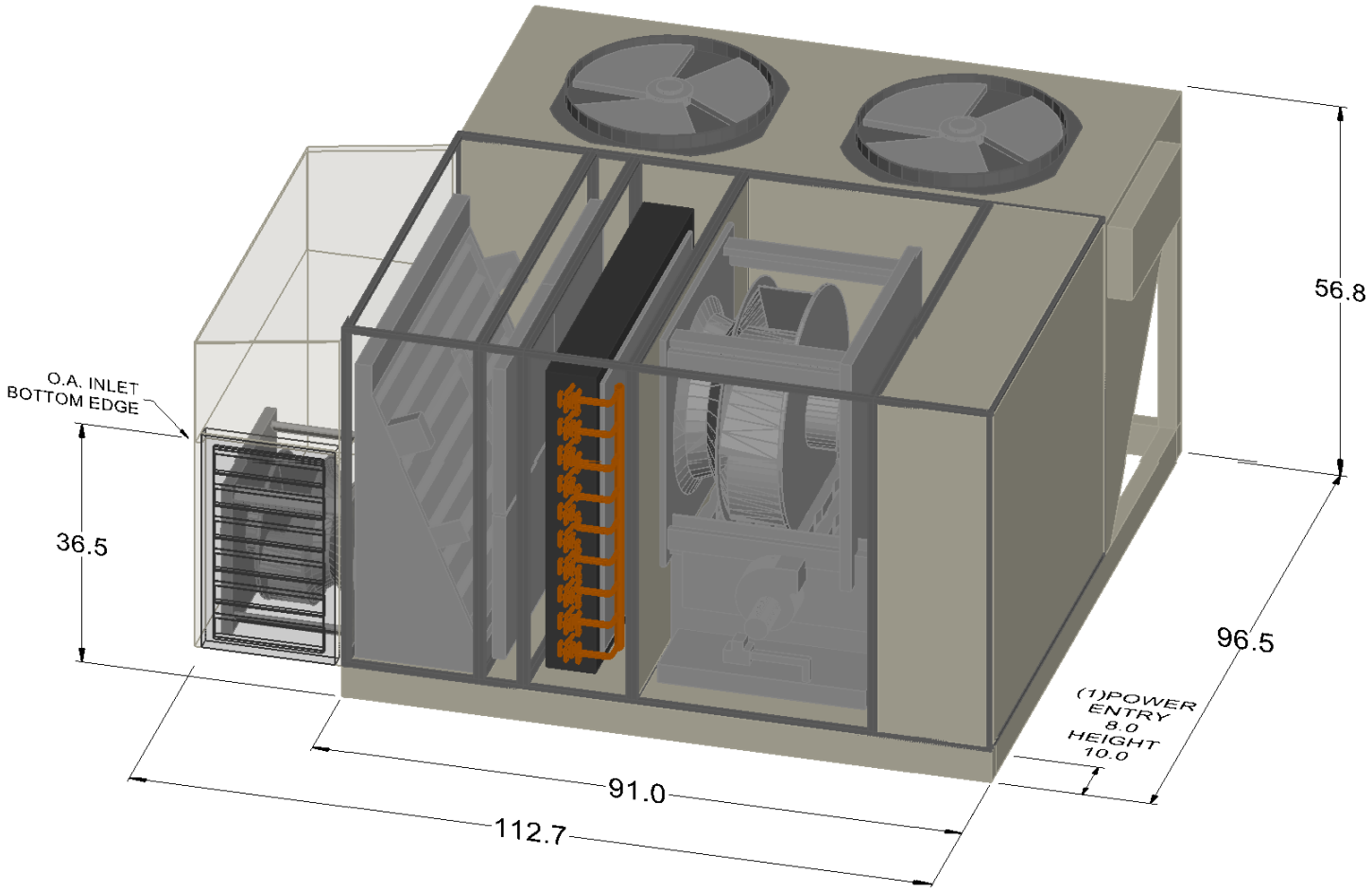
SENSOR DESCRIPTION	LABEL
Return Air Temp Sensor	A
Discharge Air Temperature sensor – Wired in unit, mounted in supply duct	B
Outside Air Temp Sensor	C
Return air Enthalpy Sensor	D
Outside Air Enthalpy Sensor	E
Dirty Filter On/Off Switch	F
Supply Fan Air Proving Via Modbus	G
Duct High Limit Switch	H
Duct Static Pressure Sensor	I
Building static pressure sensor	J
Leaving Coil/Entering Fan Temp Sensor	K
BACnet/IP card	BAS Comm.
LON card	
BACnet/MSTP card	
Daikin Intelligent systems Card	
DIII Gateway Card (VRV Communication)	
Condensate Overflow Switch	L
Ebtron Airflow Station	M
Supply Leaving Wheel Temp Sensor	N
Exhaust Leaving Wheel Temp Sensor	O
Return Air Relative Humidity Sensor	P
Energy Wheel VFD	Q

1) Sensors provided are based on unit selection. Refer to unit specific technical data sheet for selection specific sensor list.

Product Drawing	Unit Tag: AC-25A,25B			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS010A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com	Software Version: 09.70	
Sales Engineer:	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

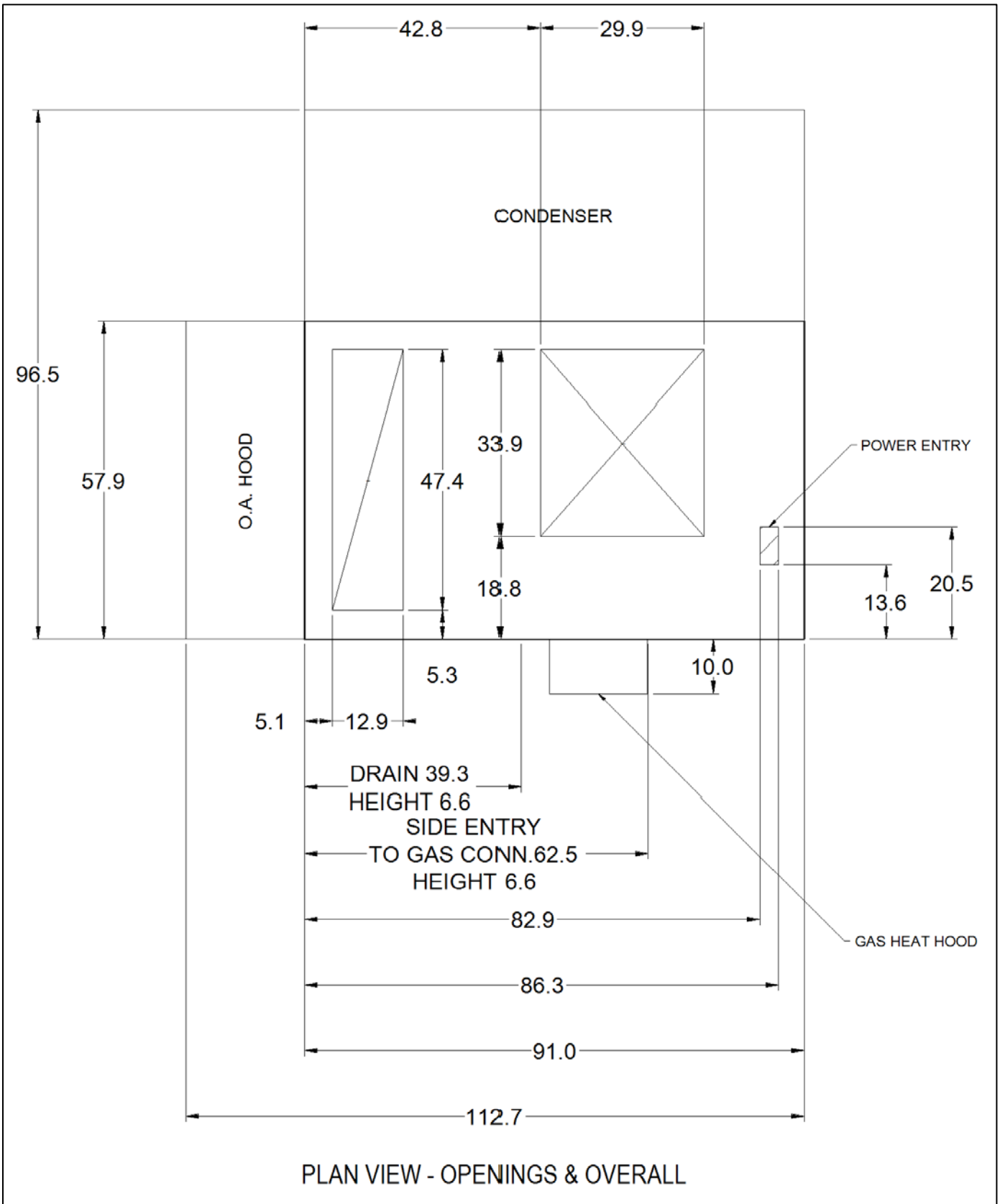
Drawings(1) for AC-25A,25B



Notes:
(1) Recommended location for optional field cut side power connection.
(2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

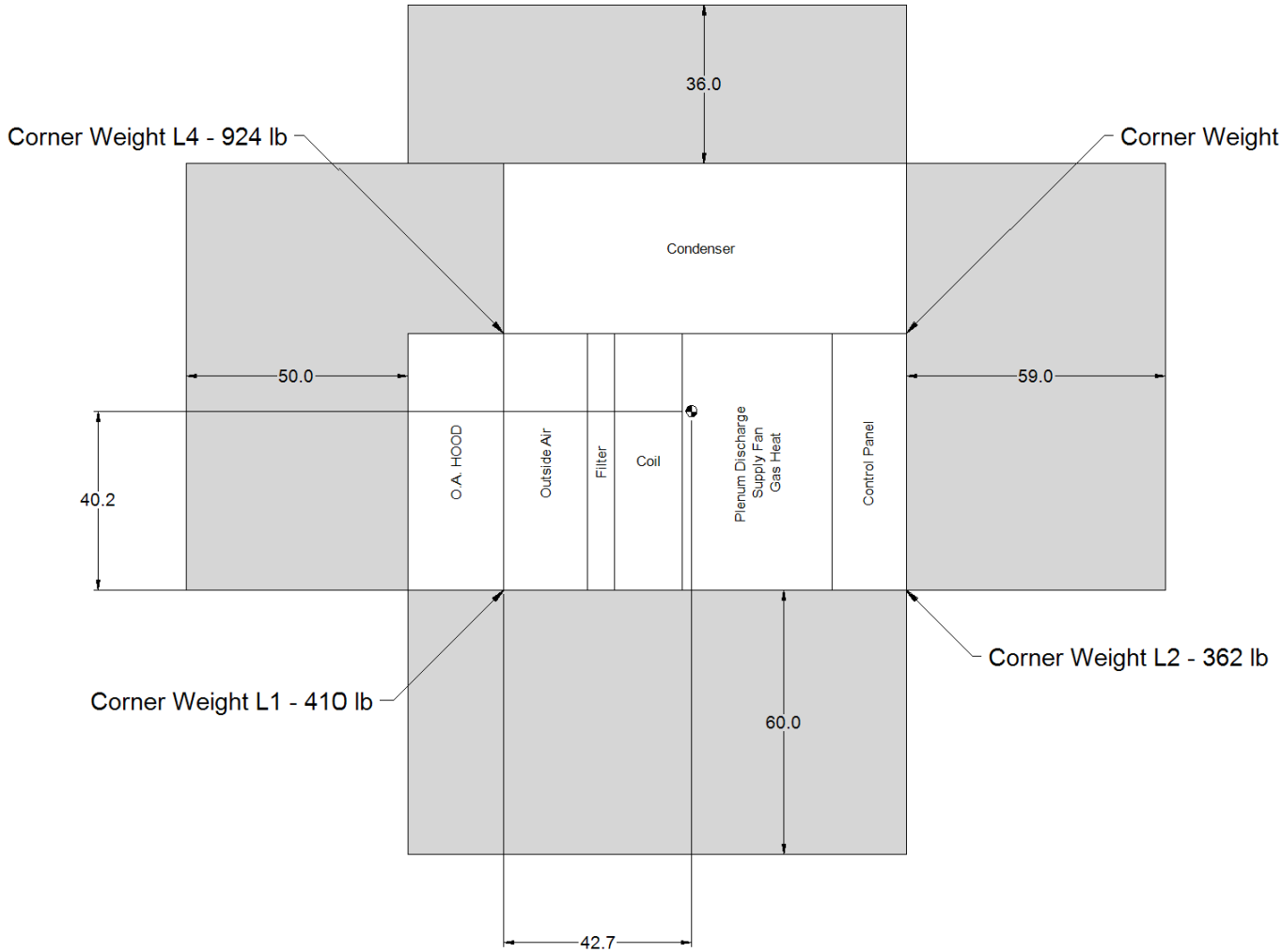
Product Drawing	Unit Tag: AC-25A,25B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS010A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

Drawings(2) for AC-25A,25B



PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Unit Tag: AC-25A,25B			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS010A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com		Software Version: 09.70
Sales Engineer: SalesEngineer	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

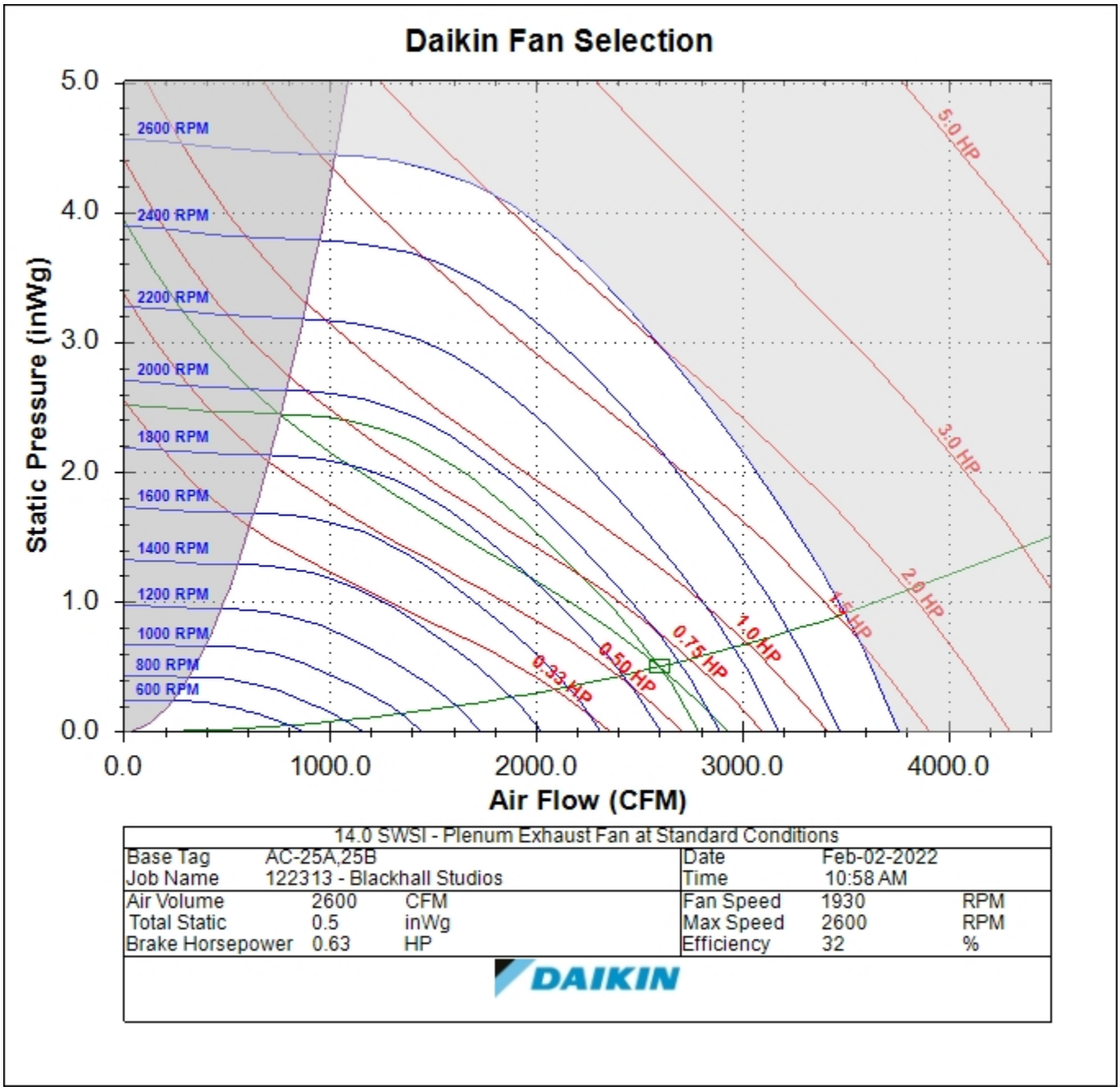


PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

Notes:
(1) Center of Gravity Height = 27.4
(2) Total Weight = 2513 lb

Product Drawing	Unit Tag: AC-25A,25B			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS010A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

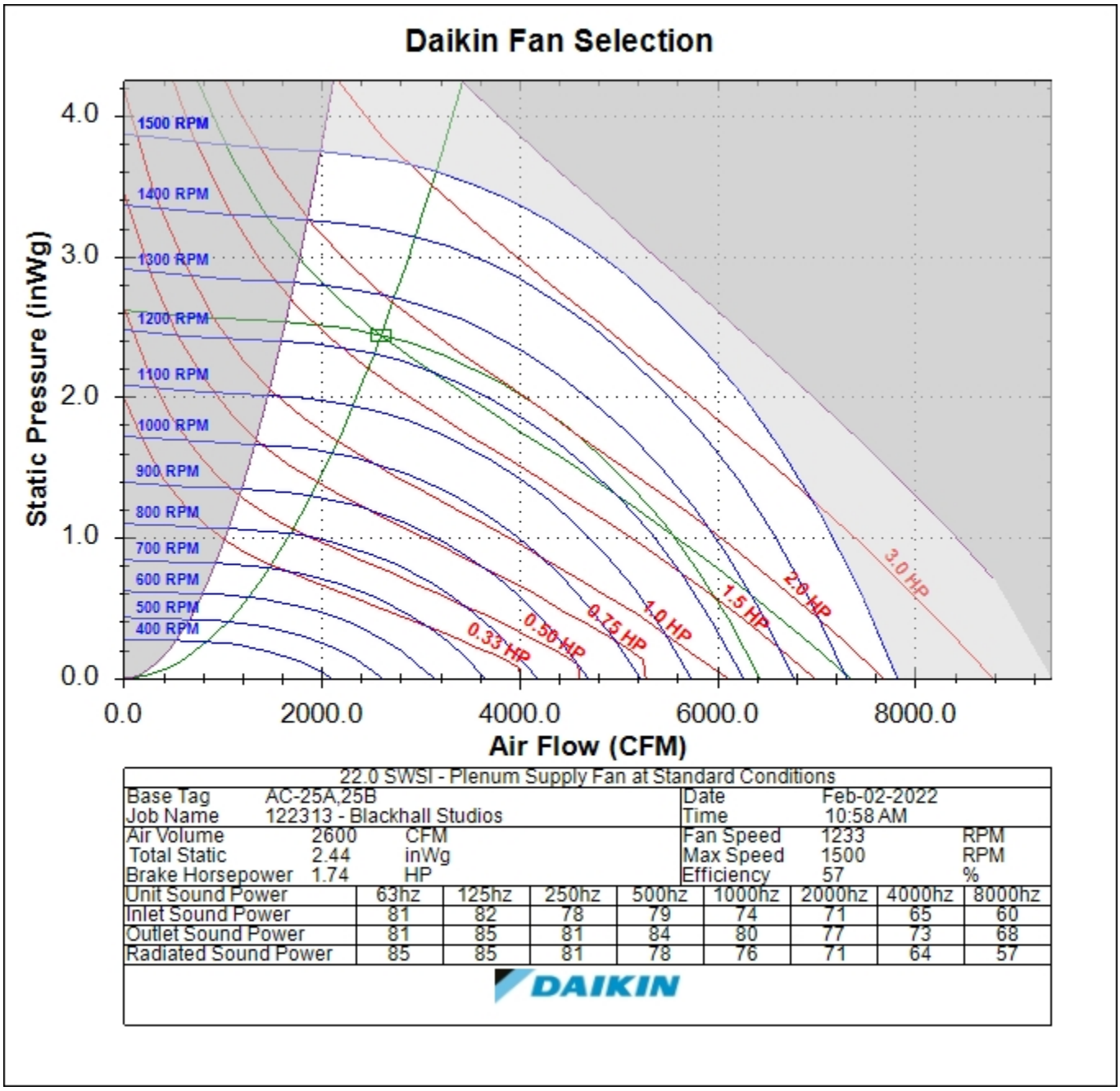
Fan Curve - Exhaust for AC-25A,25B



14.0 SWSI - Plenum Exhaust Fan at Standard Conditions					
Base Tag	AC-25A,25B		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	2600	CFM	Fan Speed	1930	RPM
Total Static	0.5	inWg	Max Speed	2600	RPM
Brake Horsepower	0.63	HP	Efficiency	32	%

DAIKIN

Fan Curve - Supply for AC-25A,25B



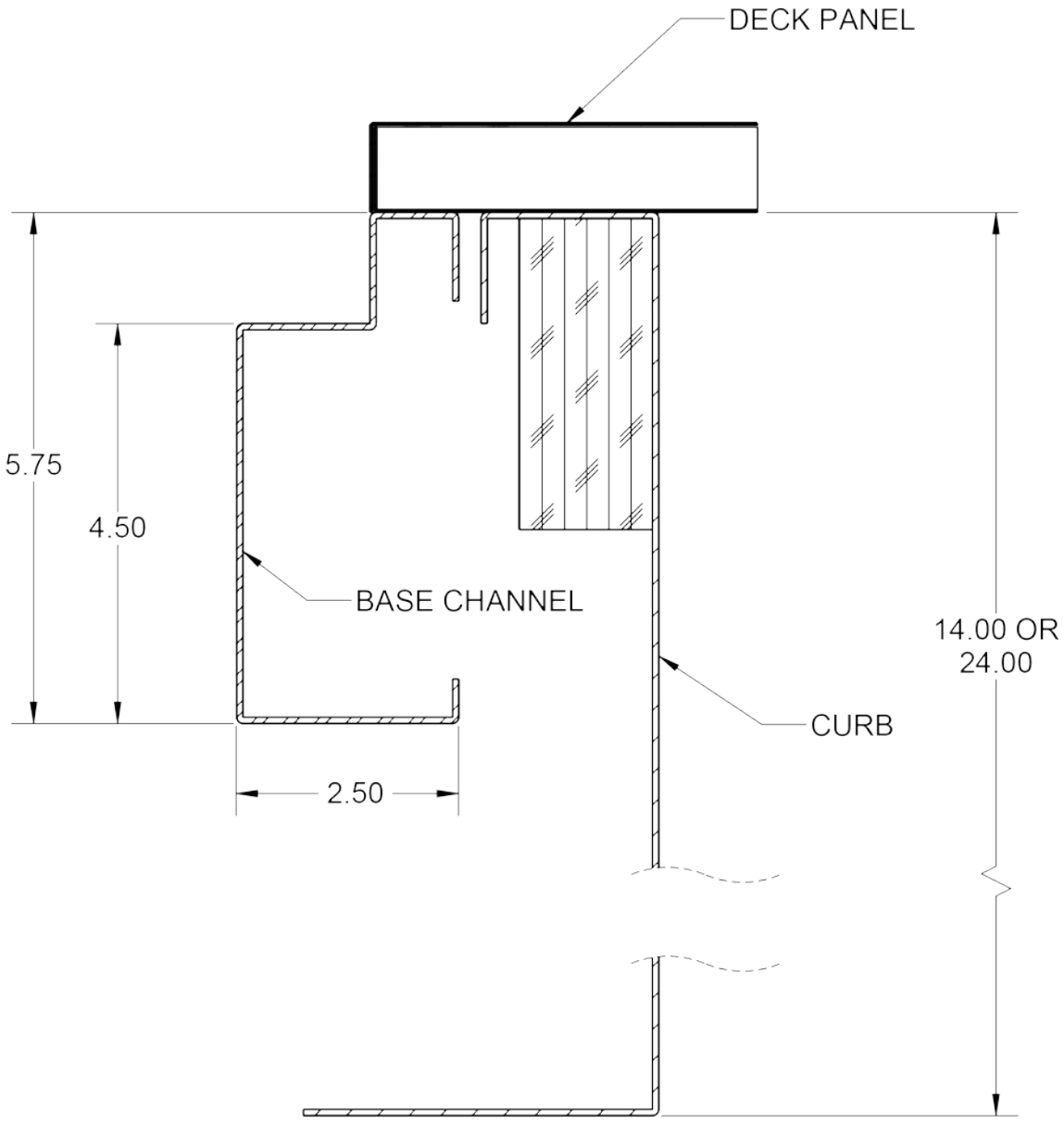
22.0 SWSI - Plenum Supply Fan at Standard Conditions

Base Tag	AC-25A,25B		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	2600	CFM	Fan Speed	1233	RPM
Total Static	2.44	inWg	Max Speed	1500	RPM
Brake Horsepower	1.74	HP	Efficiency	57	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	81	82	78	79	74	71	65	60
Outlet Sound Power	81	85	81	84	80	77	73	68
Radiated Sound Power	85	85	81	78	76	71	64	57

DAIKIN

Small and Medium Cabinet Rebel Base Rail_Drawing for AC-25A,25B



Product Drawing	Unit Tag: AC-25A,25B			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS010A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com	Software Version: 09.70	
Sales Engineer:	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Technical Data Sheet for AC-6A,7A,8A,9A

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	07.91
Unit Tag	AC-6A, AC-7A, AC-8A, AC-9A
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RDT120D	460/60/3	1129055	9.8	2016 Compliant

Unit

Model Number:	RDT120D
Altitude:	0 ft
Heat Type:	None
Condenser Type:	Air-Cooled
Condenser Sound:	Quiet Condenser Fans
Approval	ETL/MEA-USA unit

Physical

Unit

Length	Height	Width	Weight	Estimated Lifting Lugs
499 in	97.0 in	99.0 in	17241 lb	3 per side

Electrical

Voltage	MCA	MROPD	SCCR
460/60/3	258.6 A	300 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Return/Outside/Exhaust Air

Outside Air Option

Type	Pressure Drop	Damper Actuator
California and90.1 Compliant Economizer	0.32 inH_2O	Electric Actuator

Return Air Option

Return Air Location:	Back

Blank Section

Section Length:	48.0 in
Notes:	

Technical Data Sheet for AC-6A,7A,8A,9A

Filter Section

Physical

Type	(Quantity) Height x Width x Depth	Face Area	Face Velocity	Air Pressure Drop
2 in. 85% Nominal Efficiency (MERV 13)	(11) 16 in x 20 in x 2 in (33) 16 in x 25 in x 2 in	116.1 ft²	327.3 ft/min	0.20 inH_2O

Blank Section

Section Length:	48.0 in
Notes:	

DX Cooling Coil

Physical

Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material	Casing Material
12	6	75.9 ft²	500.7 ft/min	0.85 inH_2O	Stainless Steel	Stainless Steel

Cooling Performance

Capacity		Refrigerant Type	Indoor Air Temperature				Ambient Air Temperature	
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr		Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F
1129055	1095729	R410A	74.0	58.3	47.6	46.9	105.0	70.0

Biological Control:	UV Light

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation	Fan Efficiency Index
AF SWSI	49 in	Spring	0.719

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower
38000 CFM	3.87 inH_2O	832 rpm	36.28 HP

Motor			Drive
Type	Horsepower	FLA	Type
ODP, Premium Efficiency	40.0 hp	46.0 A	Standard service factor, Fixed drive

Discharge Location:	Left Side

Unit Discharge Conditions

AirTemperature

DX coil Configuration:	Draw-thru Coil

Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
102546	29.1	50.1	47.7	46.2

Technical Data Sheet for AC-6A,7A,8A,9A

Condensing Section

Compressor

Type	Quantity	Total Power	Capacity Control	Compressor Isolation
Scroll	6	119.1 kW	6 stage	Resilient

Compressor Amps:

Fixed Speed Compressor 1	26.9 A
Fixed Speed Compressor 2	34.8 A
Fixed Speed Compressor 3	26.9 A
Fixed Speed Compressor 4	34.8 A
Fixed Speed Compressor 5	26.9 A
Fixed Speed Compressor 6	34.8 A

Compressor Options:	Refrigeration Service Valves
Piping Options:	Hot gas bypass, circuit 1, 2, Replaceable core filter drier

Condenser Coil

Type	Fins per Inch	Fin Material	Refrigerant Charge
Aluminum tube MicroChannel	18	Aluminum	159.0 lb

Condenser Coil Options:	Build in Hail Protection

Condenser Fan Motors

Number of Motors	Full Load Current (each)
9	1.5 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

EER	IEER	ASHRAE 90.1
9.8	13.4	2016 Compliant

Sound

Sound Power (db)

Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	85	84	79	74	71	64	56	48
Discharge	86	83	79	77	76	71	63	56
Radiated	-	93	85	87	89	89	83	74

Supply Fan Total Pressure Drop Calculation

External Static Pressure:	1.50 inH_2O
Filter:	0.20 inH_2O
Dirty Filter:	1.00 inH_2O
Outside Air:	0.32 inH_2O
DX Coil:	0.85 inH_2O
Total Static Pressure:	3.87 inH_2O

Technical Data Sheet for AC-6A,7A,8A,9A

Options	
Unit	
Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Underliners:	Sheet Metal Underliner - Recommended for rail mounted units
Fan Section Lights:	Supply Fan Section Light
Fan Shaft Grounding:	Fan motors are provided with shaft grounding rings and class H insulation.
Electrical	
Electrical Connection Option:	Single thru door disconnect switch
GFI 115v Receptacle:	Field powered
Power Options:	Phase Failure and Groundfault Protection
Controls	
Application:	Variable Volume - Discharge Air Control
Temperature Control:	DAC, BACNet MSTP communication card
Fan Speed Control:	Factory mounted Inverter
Inverter Manufacturer:	Daikin
Inverter Location:	Inverter(s) in separate section
Airflow Control:	1 duct sensor
Economizer Control:	Outside Air Dry Bulb and Enthalpy Control
Bypass Contactors:	Factory mounted Bypass Contactors
Low Ambient:	Speedtrol, operation to 0 deg F (-18 deg C)

Warranty	
Parts:	Standard 1 year
Compressor:	Extended 4 year, 5 year total

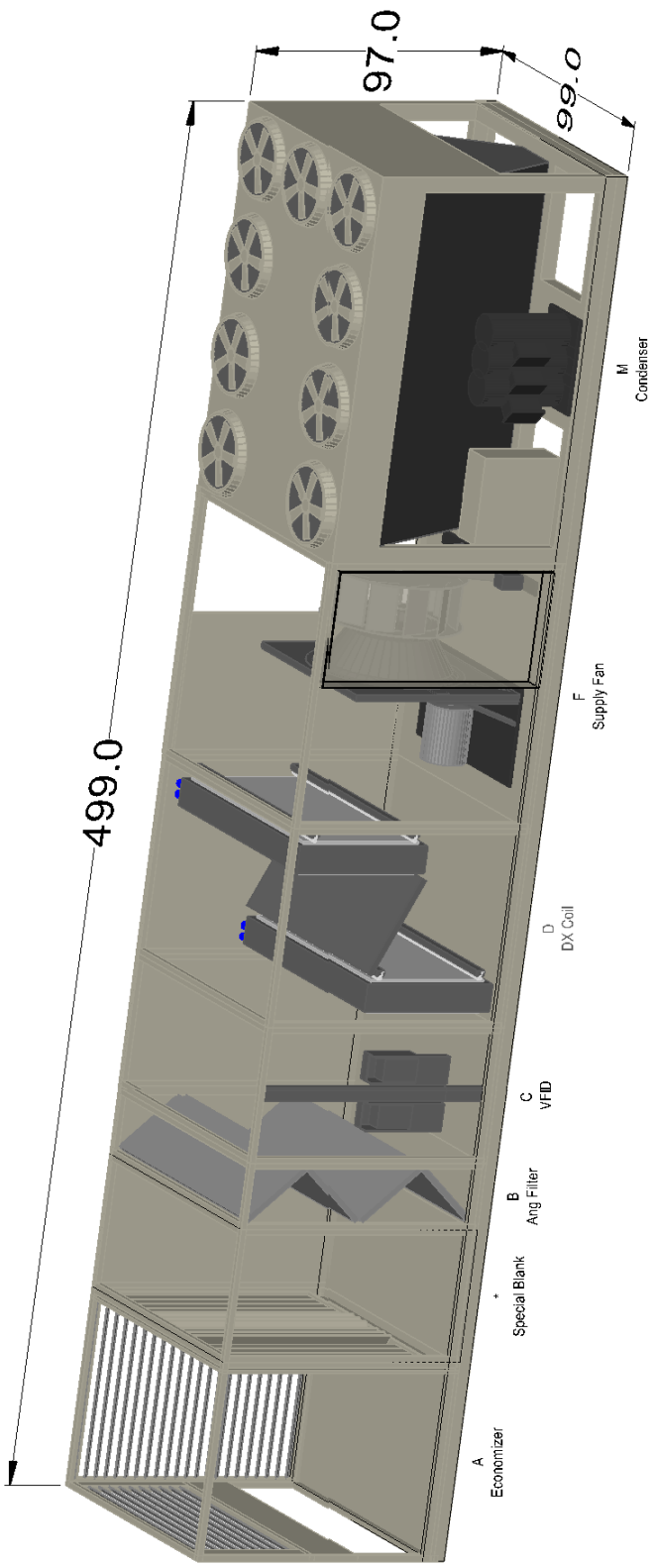
AHRI Certification

All equipment is rated and certified in accordance with AHRI 360.

Specials	
Unit	
Specials Description:	Provide 65 kAIC rating. Unit is provided with higher than standard SCCR rating and must be marked as a special for processing. Pricing is already accounted for in the item summary. Use FPA# "SCCR" Unit provided with factory wired terminals for Purge Sequence. Unit will be marked as a special for processing . Use FPA# "Purge" if no other specials from Applications. Provide Condensate Overflow alarm for Cooling Coil drain pan. Provide Stainless Steel coil casing on DX coil. Unit will be marked as a special for processing. Use FPA# "SSCasing" if no other specials from Applications Provide a 72" economizer section with reduced return opening. Unit must be marked as a special for processing. Use FPA# "72Econo" if no other specials from Applications. Provide left side return Blank 48 in section located between position A and B.

Notes

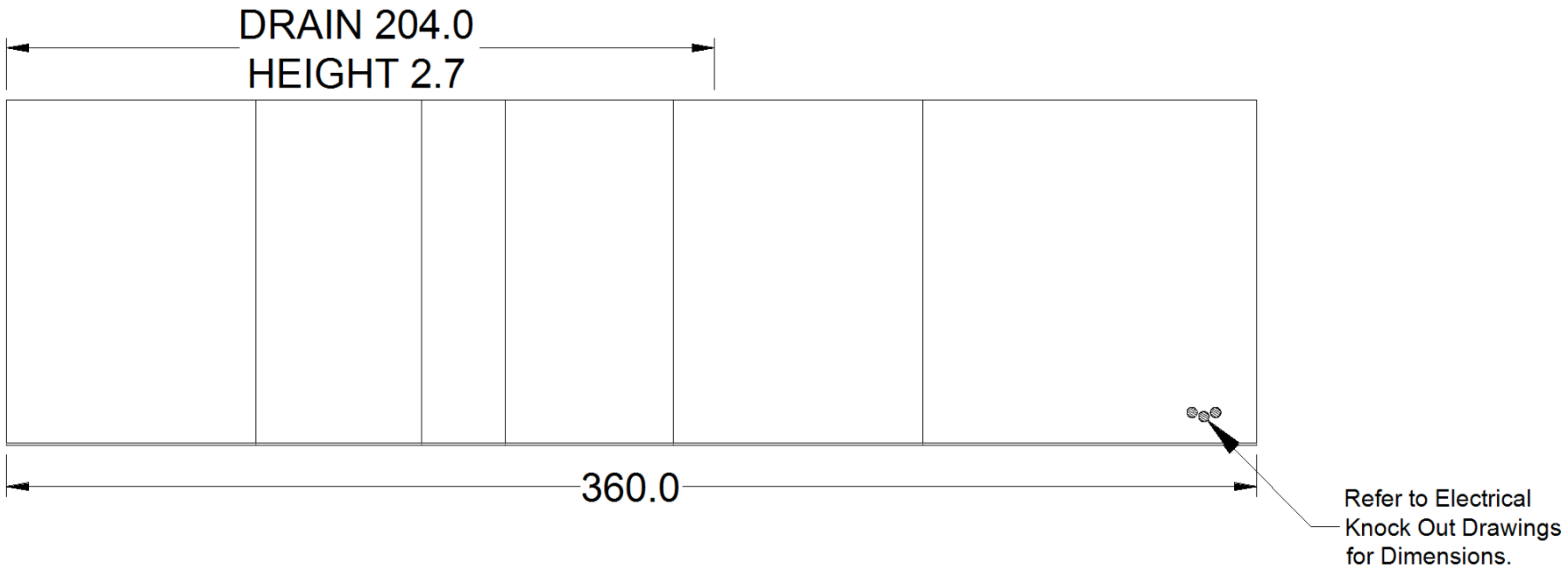
Unit has been selected with bare condenser coil. Is this application more than 50 miles from the coast?



Product Drawing	Unit Tag: AC-6A,7A,8A,9A		Sales Office: Norman S. Wright-Climatec Mechl Equip		
Product:	Project Name: 122313 - Blackhall Studios		Sales Engineer:		
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]

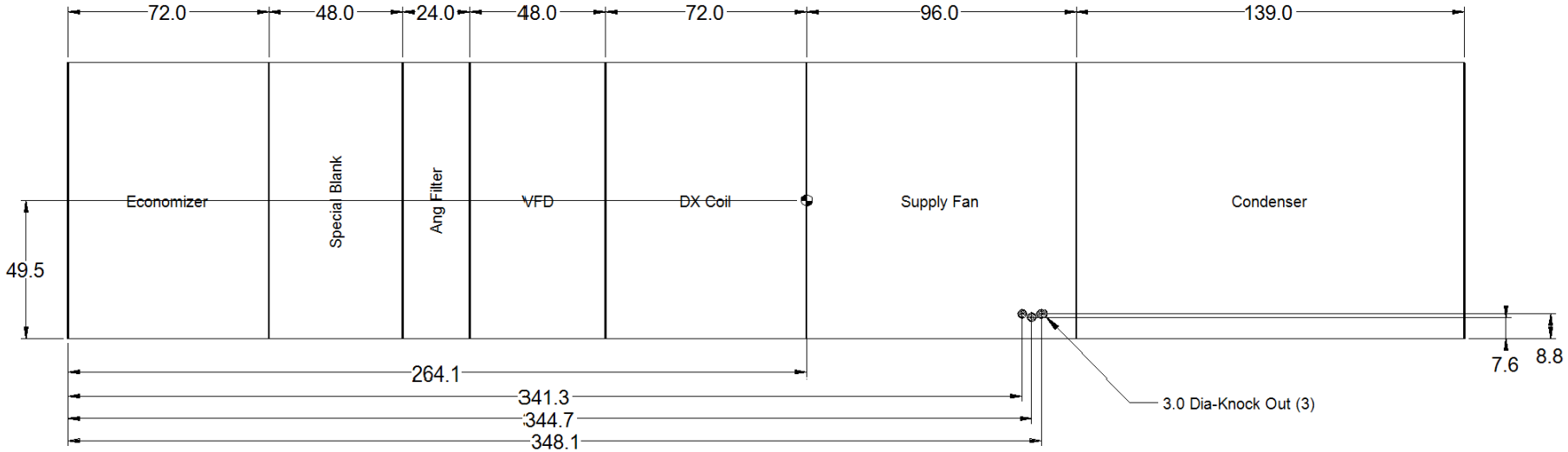
DAIKIN
13600 Industrial Park Blvd. Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 07.91

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.



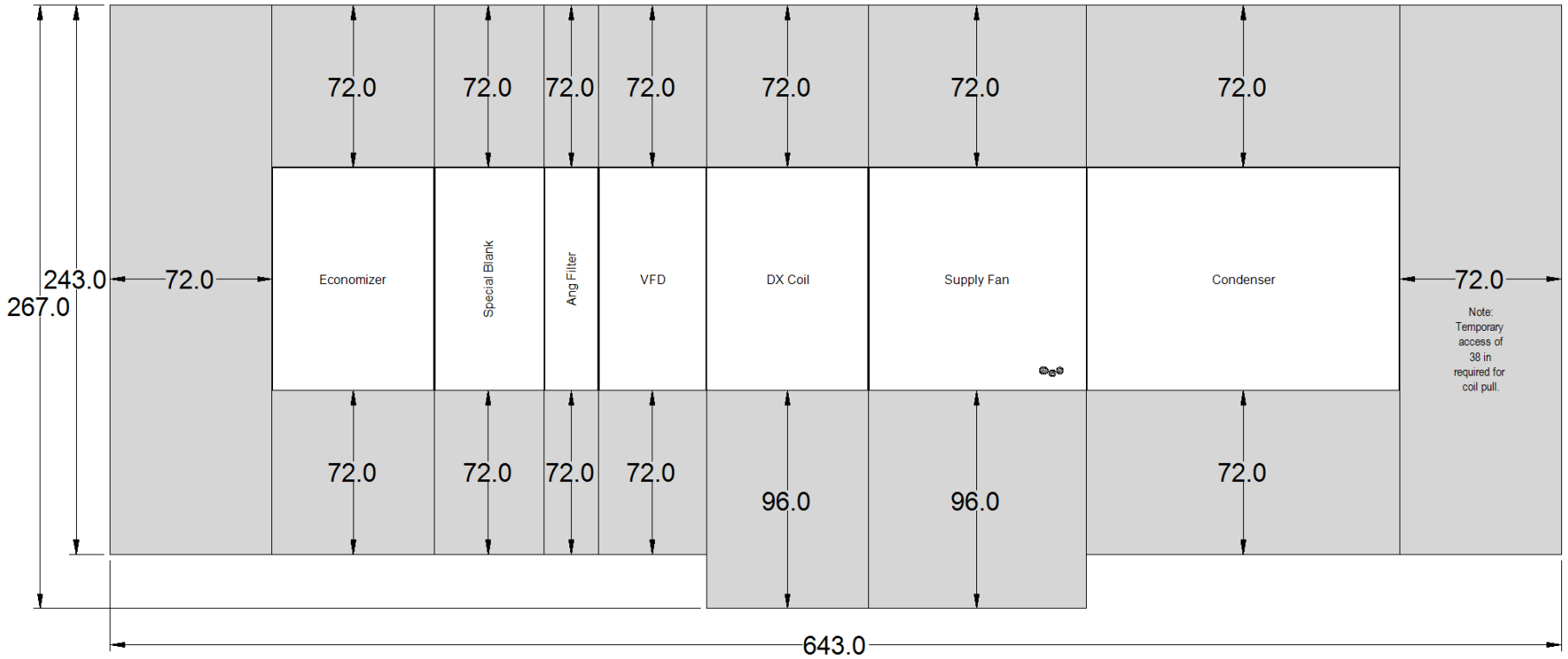
PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



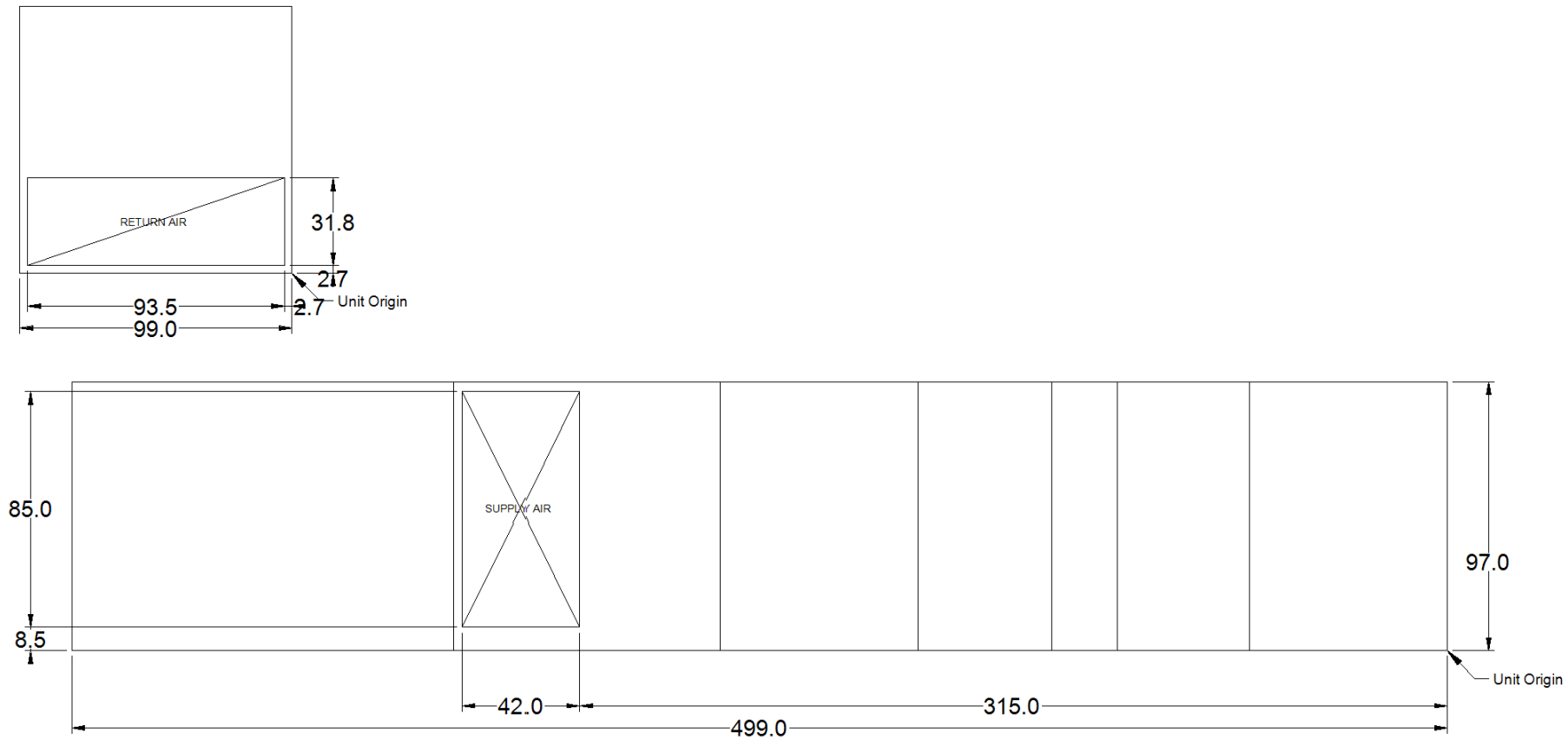
PLAN VIEW - KNOCK OUTS & CENTER-OF-GRAVITY

Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



PLAN VIEW - SERVICE CLEARANCE

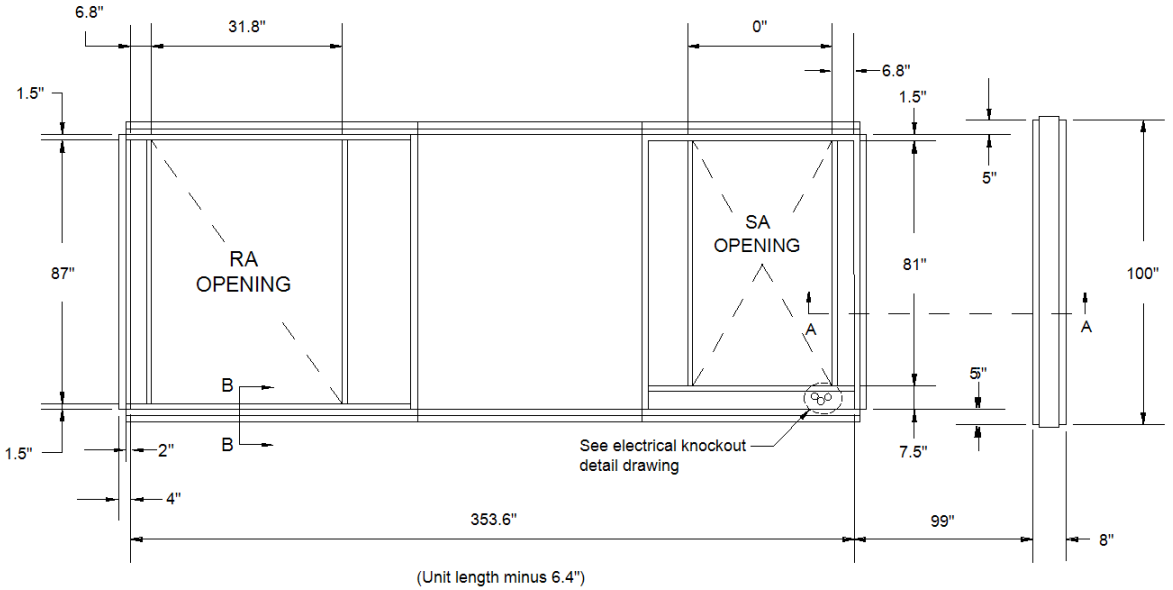
Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



ELEVATION VIEW - UNIT FACE DETAIL

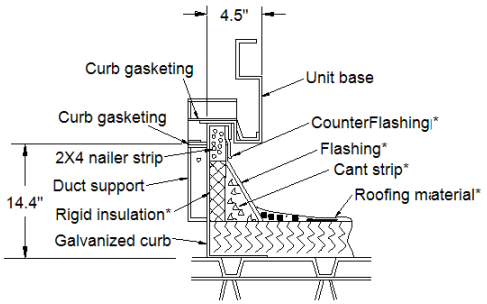
Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Curb Weight: 857.6 lbs.

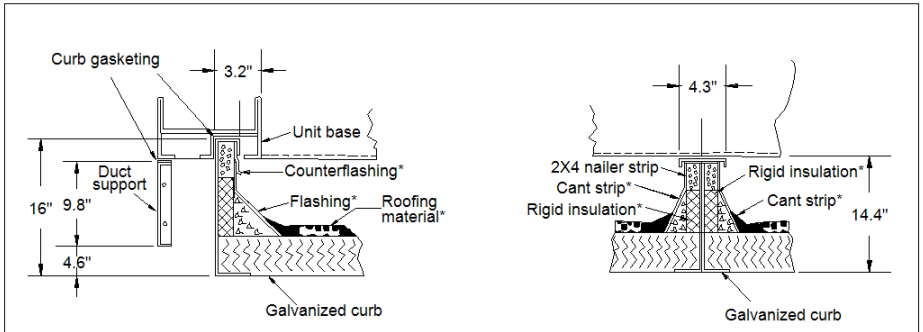


Note:
Curb must be installed level.

Cross-section B-B

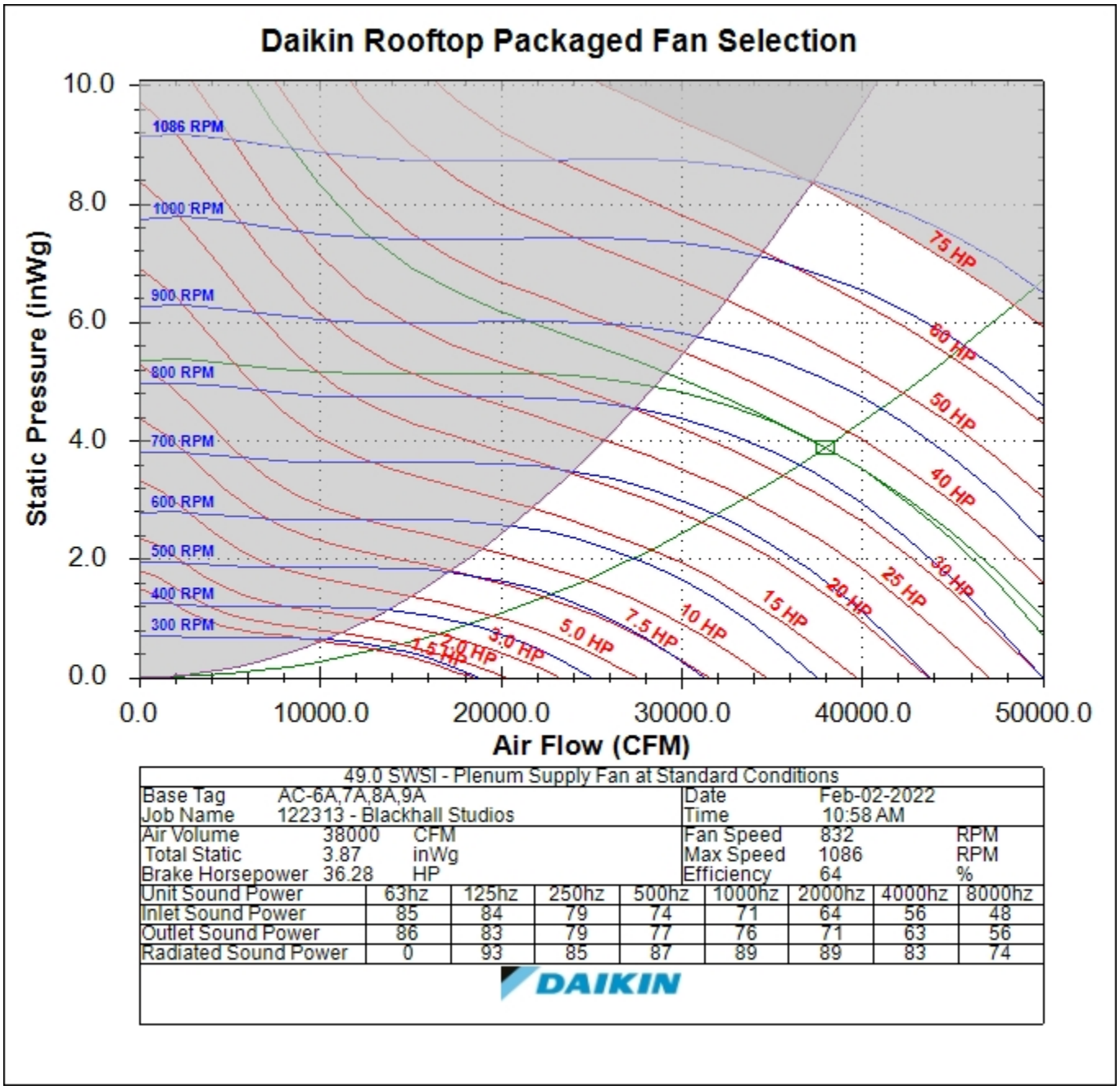


Cross-Section A-A



Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Fan Curve - Supply for AC-6A,7A,8A,9A



49.0 SWSI - Plenum Supply Fan at Standard Conditions

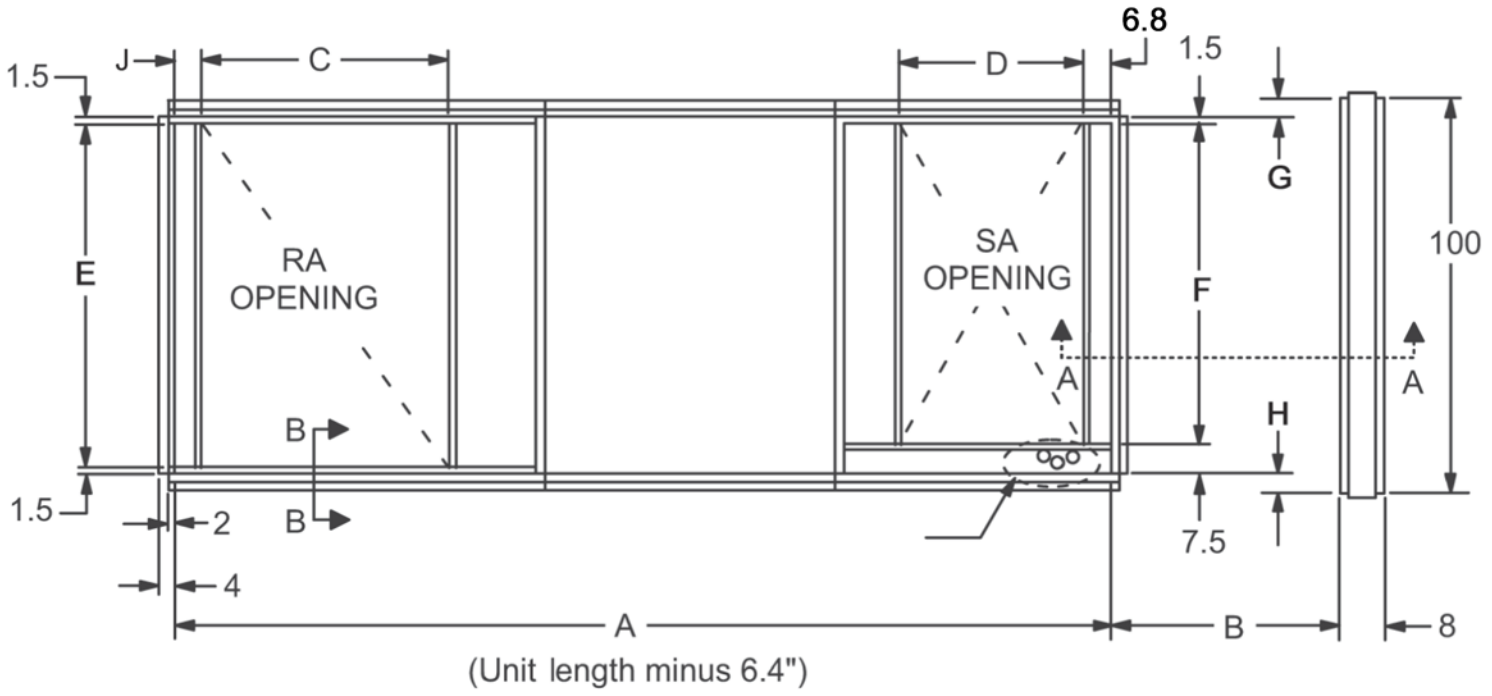
Base Tag	AC-6A,7A,8A,9A		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	38000	CFM	Fan Speed	832	RPM
Total Static	3.87	inWg	Max Speed	1086	RPM
Brake Horsepower	36.28	HP	Efficiency	64	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	85	84	79	74	71	64	56	48
Outlet Sound Power	86	83	79	77	76	71	63	56
Radiated Sound Power	0	93	85	87	89	89	83	74

DAIKIN

Roofcurb Dimensions_Drawing for AC-6A,7A,8A,9A

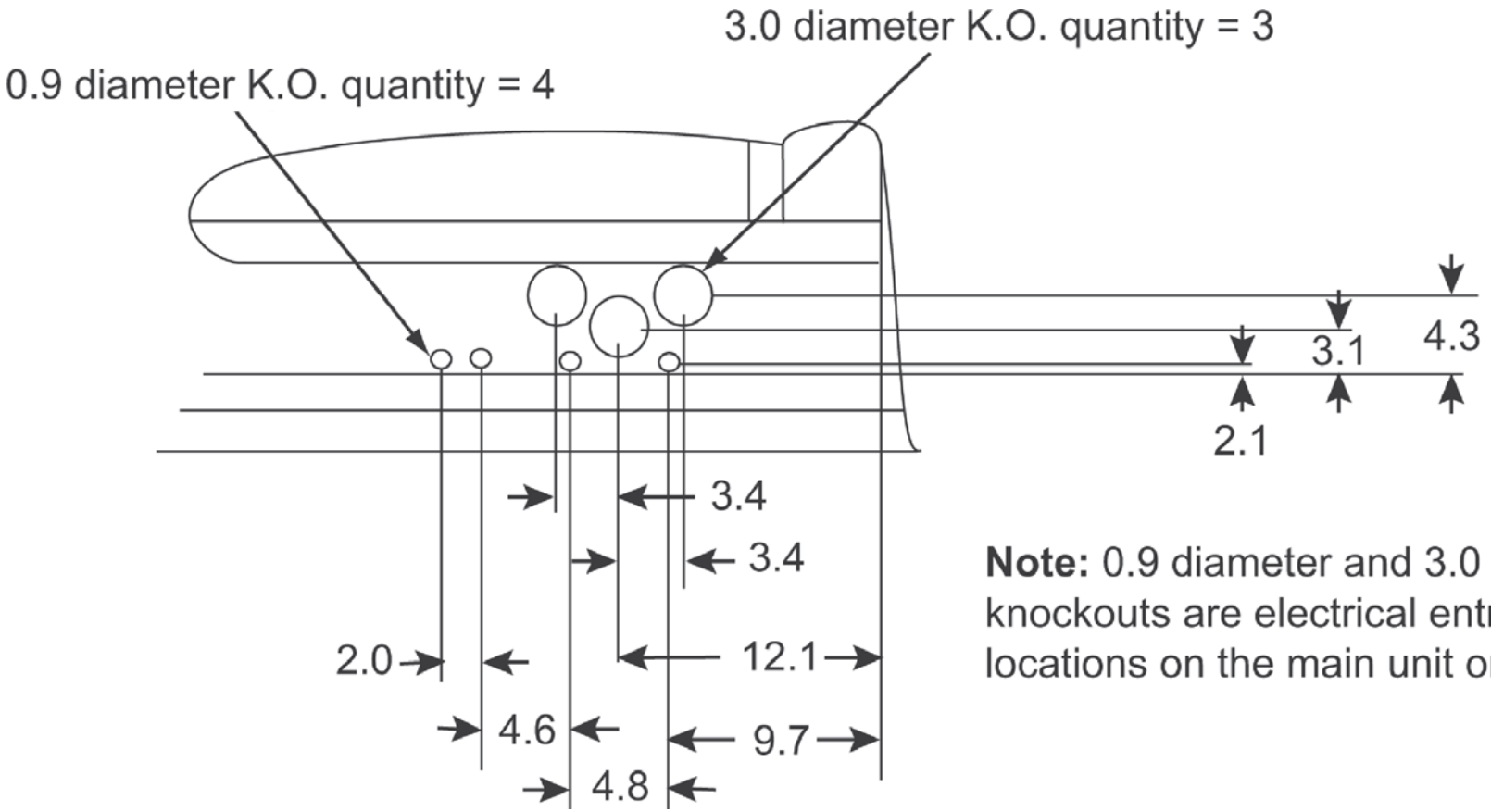
Dimensions		
Description	**Letter**	**Dimensions (in)**
Curb Length	A	353.6
Condenser Rail	B	99.0
Return Air Opening Length	C	31.8
Supply Air Opening Length	D	0.0
Return Air Opening Width	E	87.0
Supply Air Opening Width	F	81.0
Condenser Rail Overhang	G	5.0
Condenser Rail Overhang	H	5.0
Return Air Opening Location	J	6.8



Note:
Curb must be installed level.

Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: (in)	www.DaikinApplied.com Software Version: 07.91

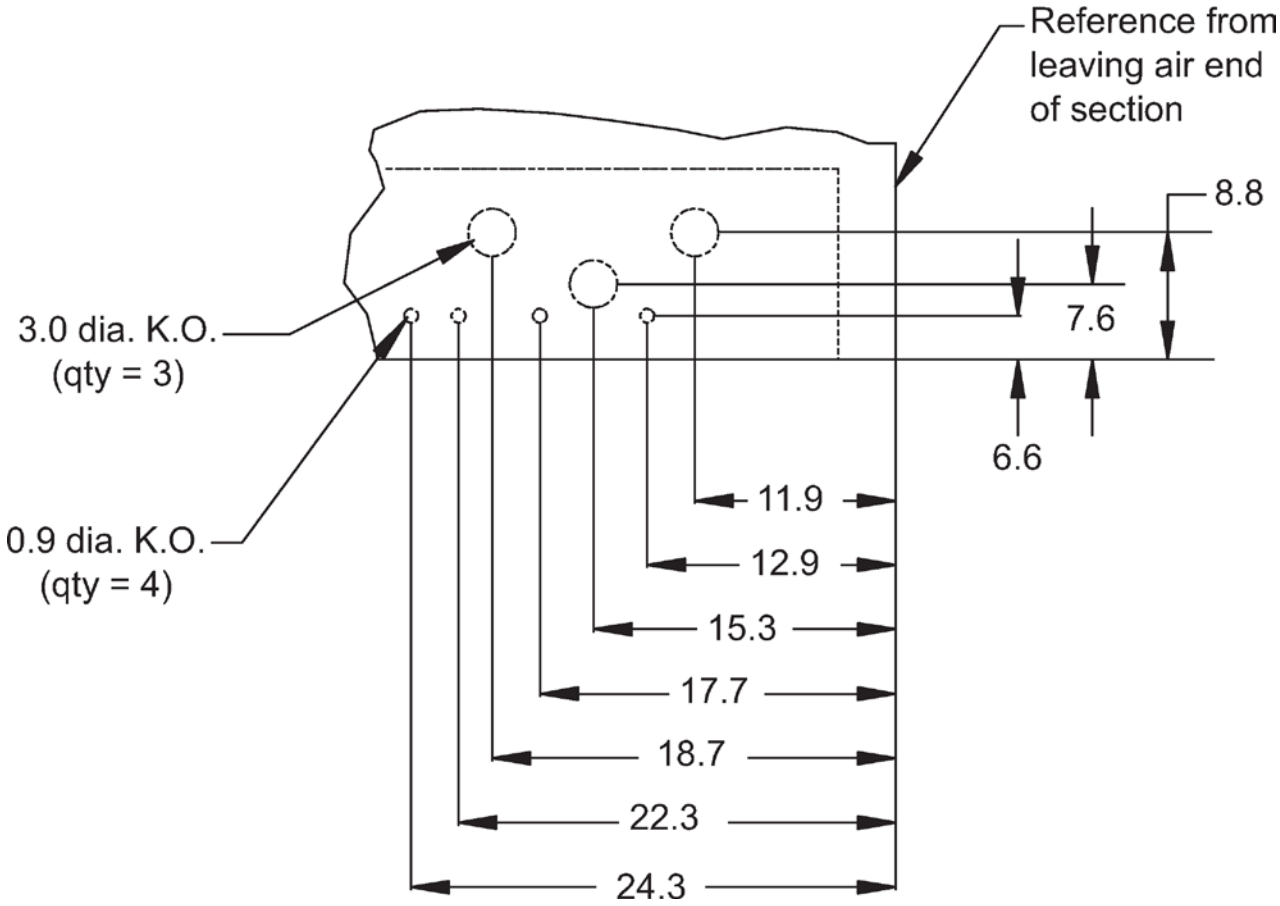
Roofcurb Knockout medium large box_Drawing for AC-6A,7A,8A,9A



Note: 0.9 diameter and 3.0 diameter knockouts are electrical entrance locations on the main unit only.

Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Unit Knockout, Large Box_Drawing for AC-6A,7A,8A,9A



Product Drawing	Unit Tag: AC-6A,7A,8A,9A			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RDT120D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Technical Data Sheet for AC-23A,23B,23C,23D,23E,23F

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	07.91
Unit Tag	AC-23, AC-23B, AC-23C, AC-23D, AC-23E, AC-23F
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RPS091D	460/60/3	894101	10.4	2016 Compliant

Unit

Model Number:	RPS091D
Altitude:	0 ft
Heat Type:	None
Condenser Type:	Air-Cooled
Condenser Sound:	Quiet Condenser Fans
Approval	ETL/MEA-USA unit

Physical

Unit

Length	Height	Width	Weight	Estimated Lifting Lugs
451 in	97.0 in	99.0 in	14730 lb	3 per side

Electrical

Voltage	MCA	MROPD	SCCR
460/60/3	222.4 A	250 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Return/Outside/Exhaust Air

Outside Air Option

Type	Pressure Drop	Damper Actuator
Plenum only	0.32 inH_2O	Electric Actuator

Return Air Option

Return Air Location:	Left

Fan

Type	Fan Diameter	Vibration Isolation	Drive Type	Fan Efficiency Index
Prop	2 - 36 in Prop	None	Standard Service Factor, Fixed Drive	0.336

Motor

Horsepower	Type	Full Load Current
10.0 HP	ODP, Premium Efficiency	6.2 A

Performance

Air Flow CFM	External Static Pressure inH_2O	Fan Speed rpm	Brake Horsepower HP
28000	0.5	1112	7.24

Technical Data Sheet for AC-23A,23B,23C,23D,23E,23F

Filter Section

Physical				
Type	**(Quantity) Height x Width x Depth**	**Face Area**	**Face Velocity**	**Air Pressure Drop**
2 in. 85% Nominal Efficiency (MERV 13)	(11) 16 in x 20 in x 2 in (33) 16 in x 25 in x 2 in	116.1 ft²	241.2 ft/min	0.13 inH_2O

DX Cooling Coil

Physical						
Fins per Inch	**Rows**	**Face Area**	**Face Velocity**	**Air Pressure drop**	**Drain Pan Material**	**Casing Material**
12	4	53.9 ft²	519.5 ft/min	0.65 inH_2O	Stainless Steel	Stainless Steel

Cooling Performance								
Capacity		**Refrigerant Type**	**Indoor Air Temperature**				**Ambient Air Temperature**	
			Entering		**Leaving**			
Total Btu/hr	**Sensible** Btu/hr		**Dry Bulb** °F	**Wet Bulb** °F	**Dry Bulb** °F	**Wet Bulb** °F	**Dry Bulb** °F	**Wet Bulb** °F
894101	794086	R410A	78.5	63.1	52.6	52.0	105.0	70.0

Fan Section

Fan			
Type	**Fan Wheel Diameter**	**Fan Isolation**	**Fan Efficiency Index**
AF DWDI	36 in	Rubber in Shear	0.870

Performance			
Airflow	**Total Static Pressure**	**Fan Speed**	**Brake Horsepower**
28000 CFM	4.61 inH_2O	1079 rpm	28.82 HP

Motor			Drive
Type	**Horsepower**	**FLA**	**Type**
ODP, Premium Efficiency	40.0 hp	46.0 A	Standard service factor, Fixed drive

Discharge Plenum

Discharge Location:	Left - Opposite Drive Side

Unit Discharge Conditions

AirTemperature				
DX coil Configuration:	Draw-thru Coil			
Motor Heat Btu/hr	**Moisture Removal** lb/h	**Unit Leaving Dry Bulb** °F	**Unit Leaving Wet Bulb** °F	**Unit Leaving Dewpoint** °F
83565	85.0	55.3	52.9	51.6

Technical Data Sheet for AC-23A,23B,23C,23D,23E,23F

Condensing Section

Compressor

Type	Quantity	Total Power	Capacity Control	Compressor Isolation
Scroll	6	85.0 kW	6 stage	Resilient

Compressor Amps:

Fixed Speed Compressor 1	23.1 A
Fixed Speed Compressor 2	23.1 A
Fixed Speed Compressor 3	23.1 A
Fixed Speed Compressor 4	23.1 A
Fixed Speed Compressor 5	23.1 A
Fixed Speed Compressor 6	23.1 A

Compressor Options:	Refrigeration Service Valves
Piping Options:	Hot gas bypass, circuit 1, 2, Replaceable core filter drier

Condenser Coil

Type	Fins per Inch	Fin Material	Refrigerant Charge
Aluminum tube MicroChannel	18	Aluminum	96.0 lb

Condenser Coil Options:	Build in Hail Protection

Condenser Fan Motors

Number of Motors	Full Load Current (each)
8	1.5 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

EER	IEER	ASHRAE 90.1
10.4	13.8	2016 Compliant

Sound

Sound Power (db)

Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	93	95	94	95	90	85	81	78
Discharge	93	92	87	85	83	78	71	64
Radiated	-	94	85	85	86	85	79	73

Supply Fan Total Pressure Drop Calculation

External Static Pressure:	2.00 inH_2O
Filter:	0.13 inH_2O
Dirty Filter:	1.00 inH_2O
Outside Air:	0.32 inH_2O
DX Coil:	0.65 inH_2O
Total Static Pressure:	4.61 inH_2O

Return/Exhaust Fan Total Pressure Drop Calculation

External Static Pressure:	0.50 inH_2O
Total Static Pressure:	0.50 inH_2O

Technical Data Sheet for AC-23A,23B,23C,23D,23E,23F

Options	
Unit	
Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Underliners:	Sheet Metal Underliner - Recommended for rail mounted units
Belt Guards:	Exhaust Air Fan Belt Guard
Fan Shaft Grounding:	Fan motors are provided with shaft grounding rings and class H insulation.
Electrical	
Electrical Connection Option:	Single thru door disconnect switch
GFI 115v Receptacle:	Field powered
Power Options:	Phase Failure and Groundfault Protection
Controls	
Application:	Variable Volume - Discharge Air Control
Temperature Control:	DAC, BACNet MSTP communication card
Fan Speed Control:	Factory mounted Inverter
Inverter Manufacturer:	Daikin
Inverter Location:	Inverter(s) in fan section
Airflow Control:	1 duct sensor, 1 space sensor (Bldg Pressure)
Economizer Control:	Outside Air Dry Bulb and Enthalpy Control
Bypass Contactors:	Factory mounted Bypass Contactors
Low Ambient:	Speedtrol, operation to 0 deg F (-18 deg C)

Warranty	
Parts:	Standard 1 year
Compressor:	Extended 4 year, 5 year total

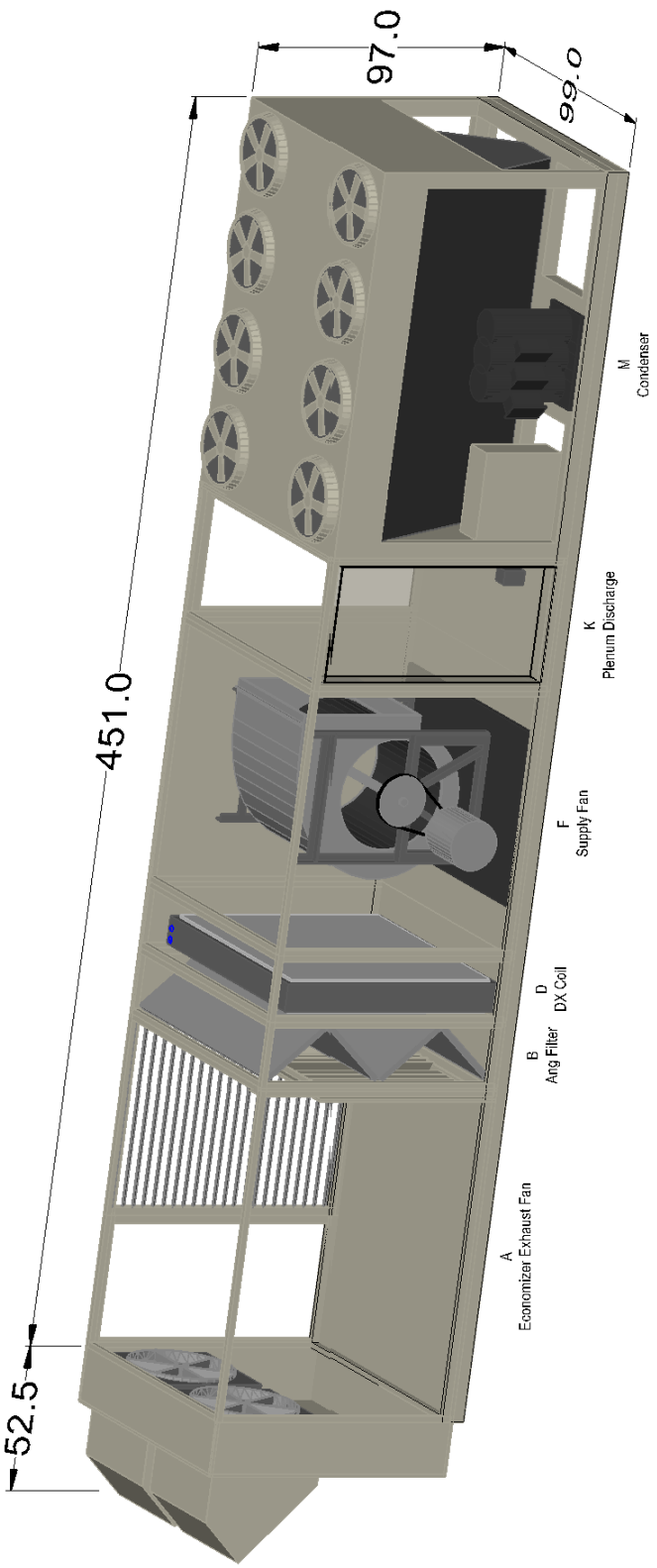
AHRI Certification

All equipment is rated and certified in accordance with AHRI 360.

Specials	
Unit	
Specials Description:	Provide 2x2 fan array with (2) VFDs, each VFD controlling (2) fans. Provide 65 kAIC rating. Unit is provided with higher than standard SCCR rating and must be marked as a special for processing. Pricing is already accounted for in the item summary. Use FPA# "SCCR" Unit provided with factory wired terminals for Purge Sequence. Unit will be marked as a special for processing . Use FPA# "Purge" if no other specials from Applications. Provide Condensate Overflow alarm for Cooling Coil drain pan. Provide Stainless Steel coil casing on DX coil. Unit will be marked as a special for processing. Use FPA# "SSCasing" if no other specials from Applications

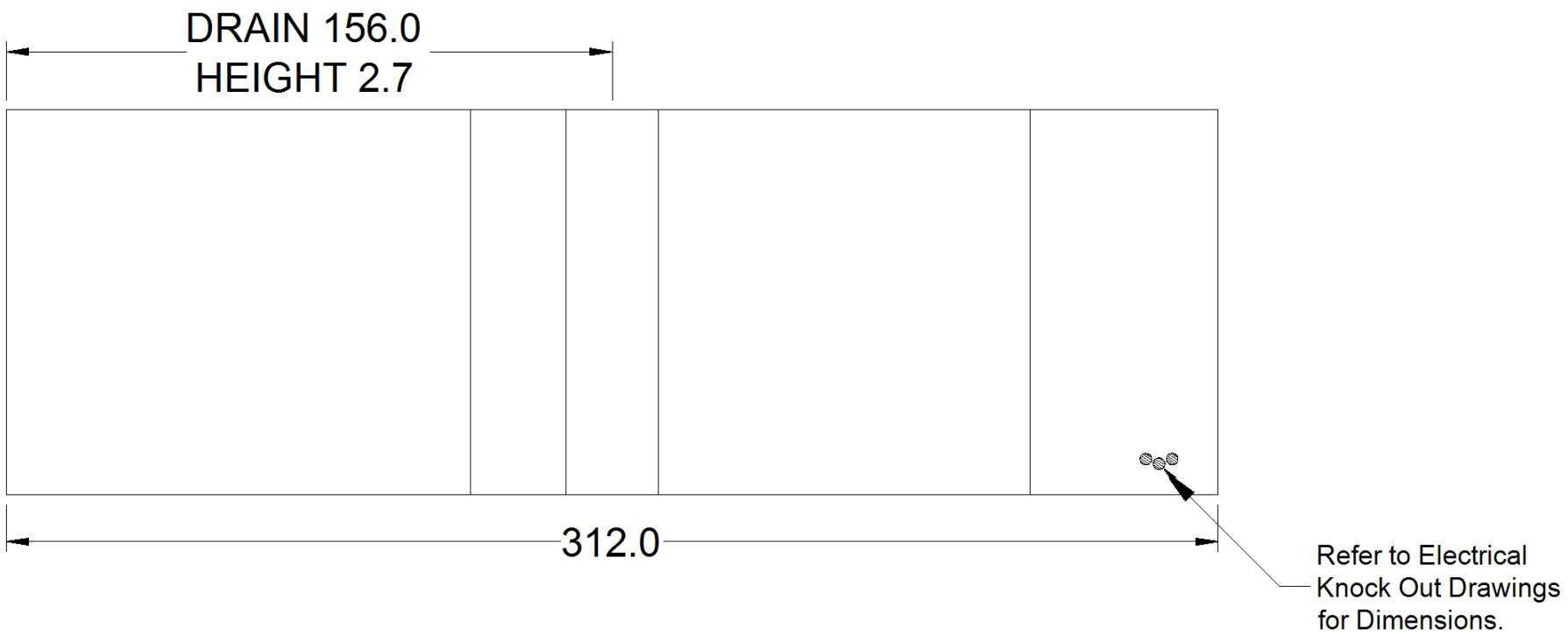
Notes

Unit has been selected with bare condenser coil. Is this application more than 50 miles from the coast?



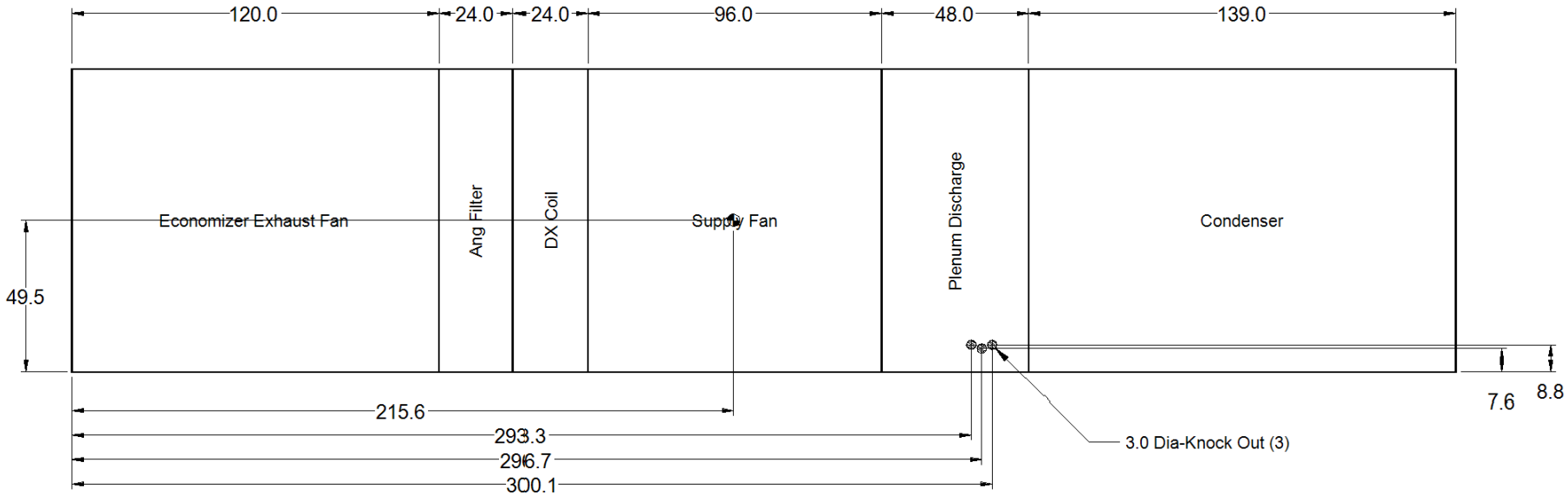
Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F	Sales Office: Norman S. Wright-Climatec Mechl Equip	DAIKIN
Product:	Project Name: 122313 - Blackhall Studios	Sales Engineer:	13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022 | Ver/Rev: | Sheet: 1 of 1	Scale: NTS | Tolerance: +/- 0.25" | Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.



PLAN VIEW - OPENINGS & OVERALL

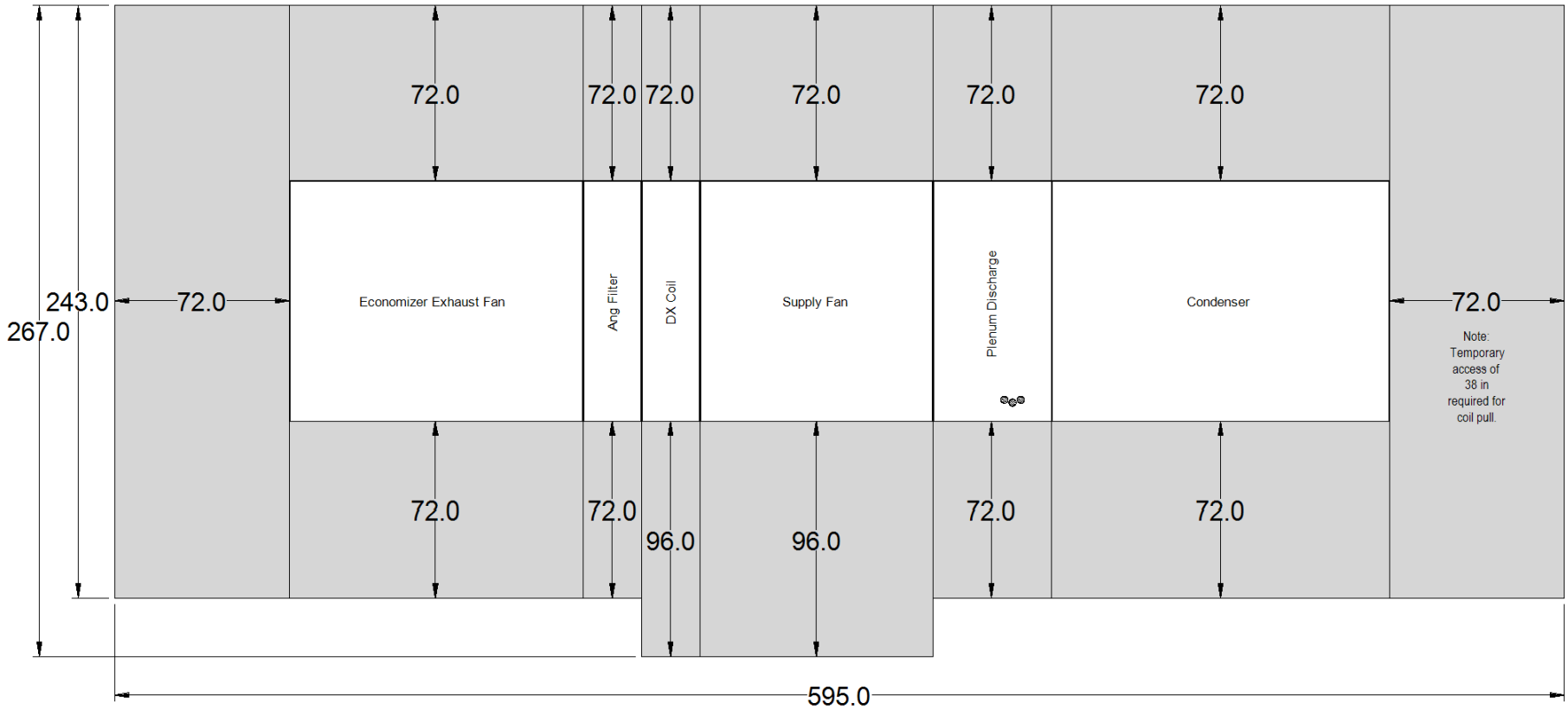
Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



PLAN VIEW - KNOCK OUTS & CENTER-OF-GRAVITY

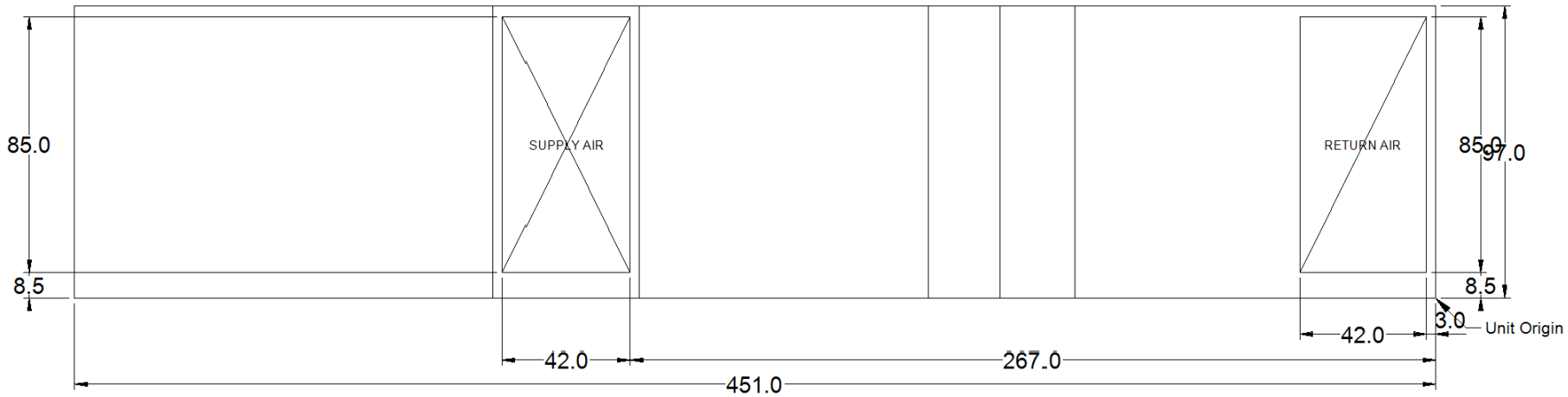
Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Drawings(4) for AC-23A,23B,23C,23D,23E,23F



PLAN VIEW - SERVICE CLEARANCE

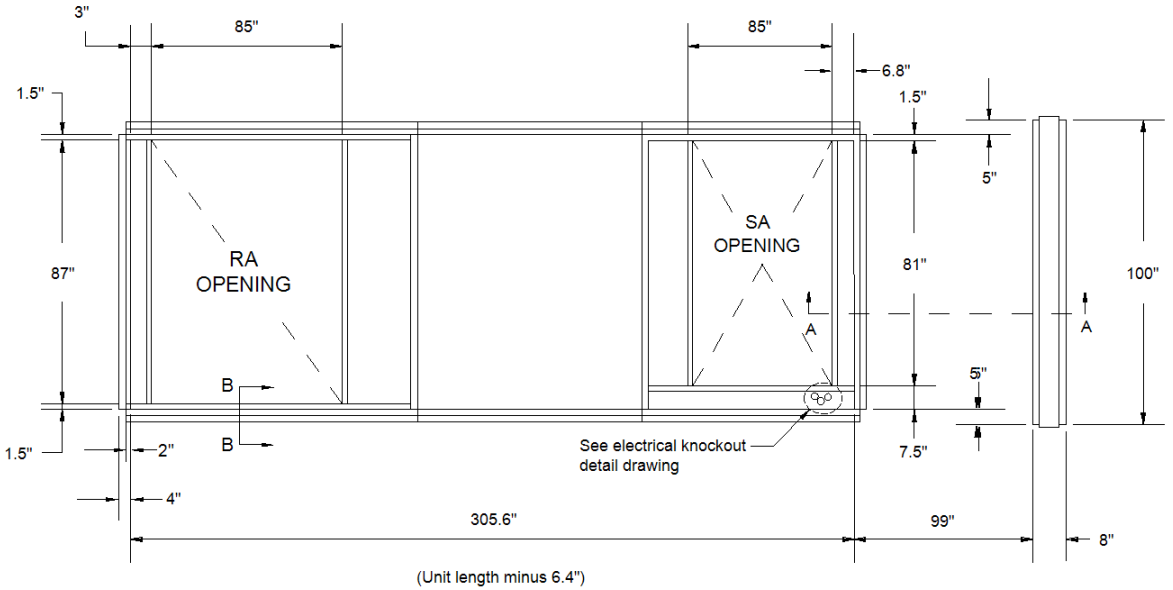
Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91



ELEVATION VIEW - UNIT FACE DETAIL

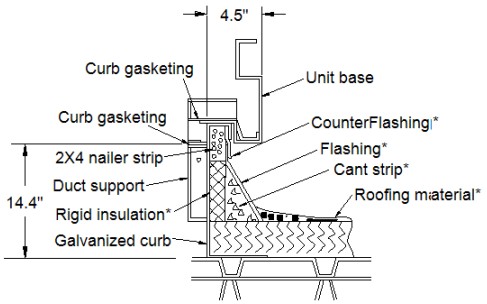
Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Curb Weight: 786.56 lbs.

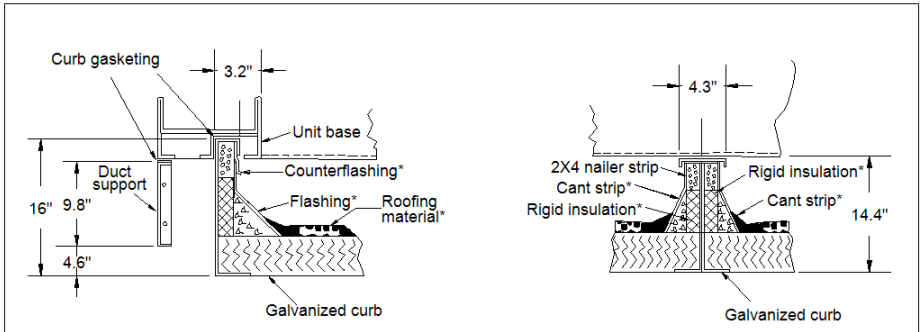


Note:
Curb must be installed level.

Cross-section B-B

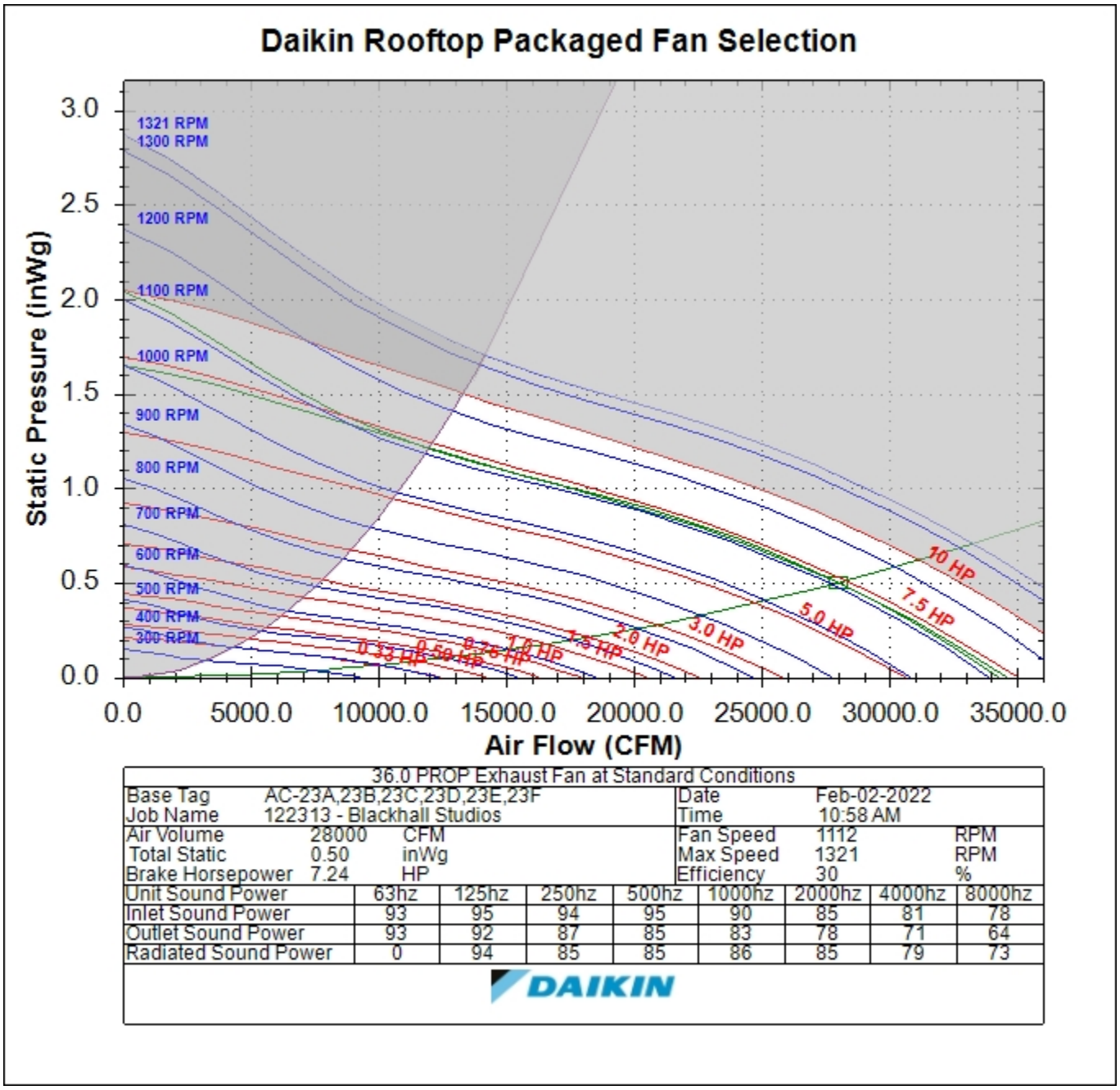


Cross-Section A-A



Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Fan Curve - Exhaust for AC-23A,23B,23C,23D,23E,23F



36.0 PROP Exhaust Fan at Standard Conditions

Base Tag	AC-23A,23B,23C,23D,23E,23F		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	28000	CFM	Fan Speed	1112	RPM
Total Static	0.50	inWg	Max Speed	1321	RPM
Brake Horsepower	7.24	HP	Efficiency	30	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	93	95	94	95	90	85	81	78
Outlet Sound Power	93	92	87	85	83	78	71	64
Radiated Sound Power	0	94	85	85	86	85	79	73

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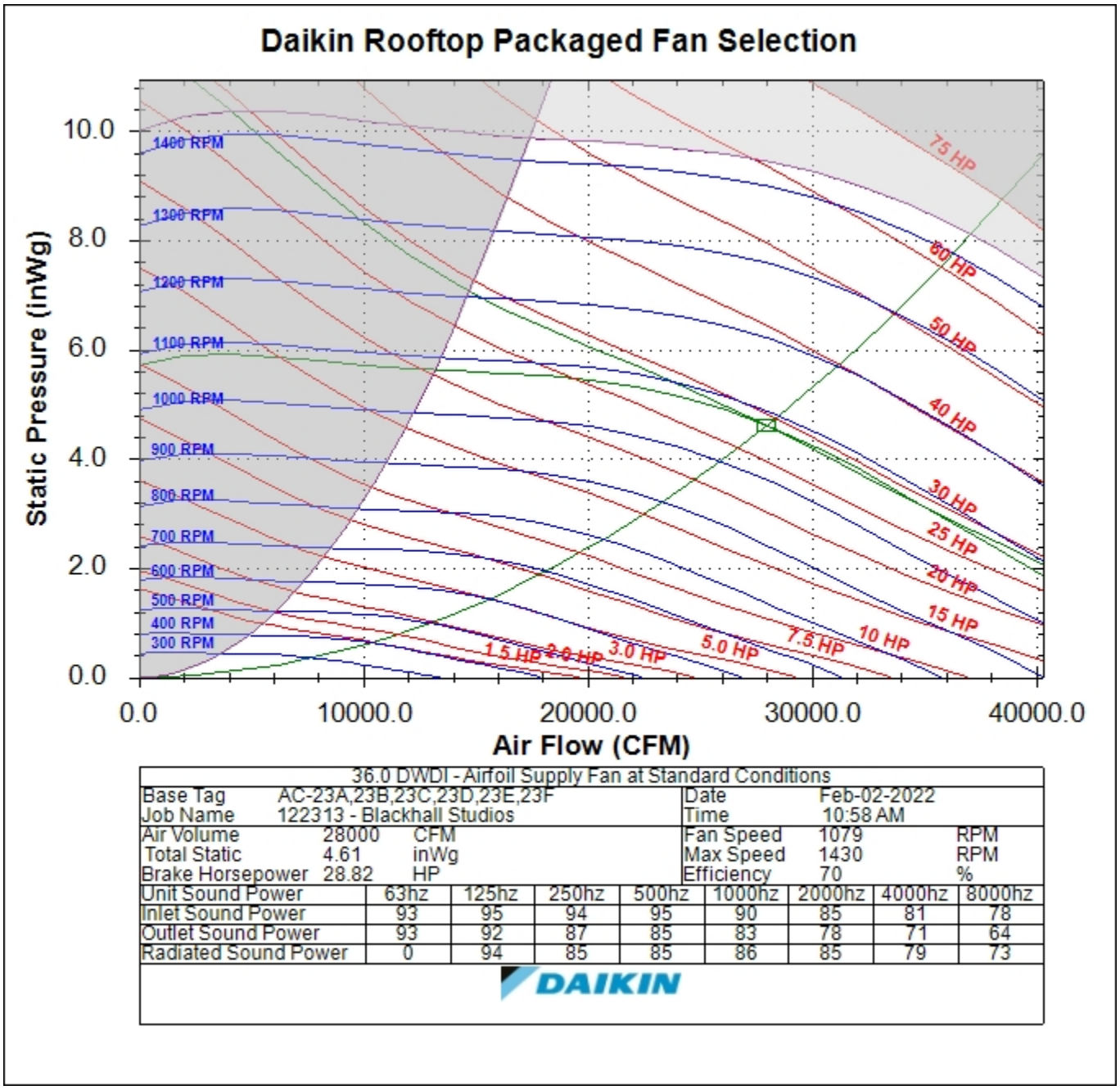
Fan Curve - Supply for AC-23A,23B,23C,23D,23E,23F



36.0 DWDI - Airfoil Supply Fan at Standard Conditions

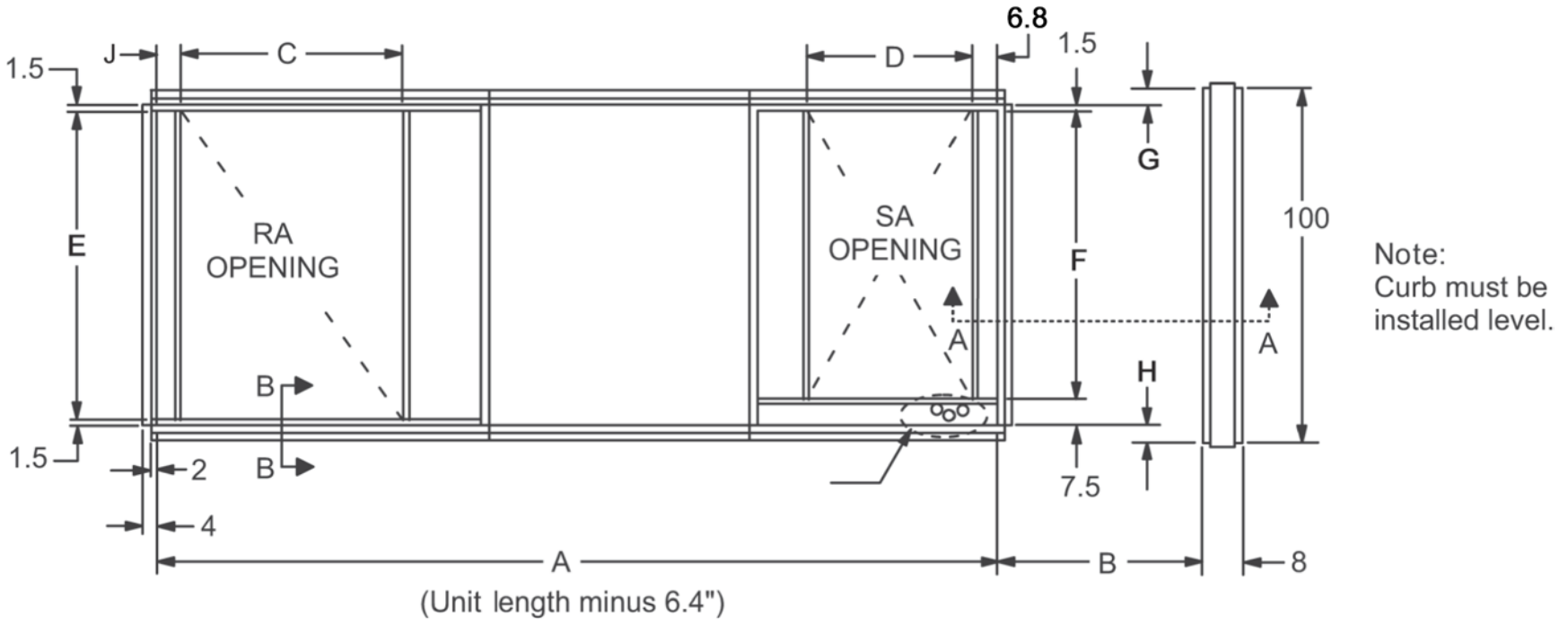
Base Tag	AC-23A,23B,23C,23D,23E,23F		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	28000	CFM	Fan Speed	1079	RPM
Total Static	4.61	inWg	Max Speed	1430	RPM
Brake Horsepower	28.82	HP	Efficiency	70	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	93	95	94	95	90	85	81	78
Outlet Sound Power	93	92	87	85	83	78	71	64
Radiated Sound Power	0	94	85	85	86	85	79	73

DAIKIN

Roofcurb Dimensions_Drawing for AC-23A,23B,23C,23D,23E,23F

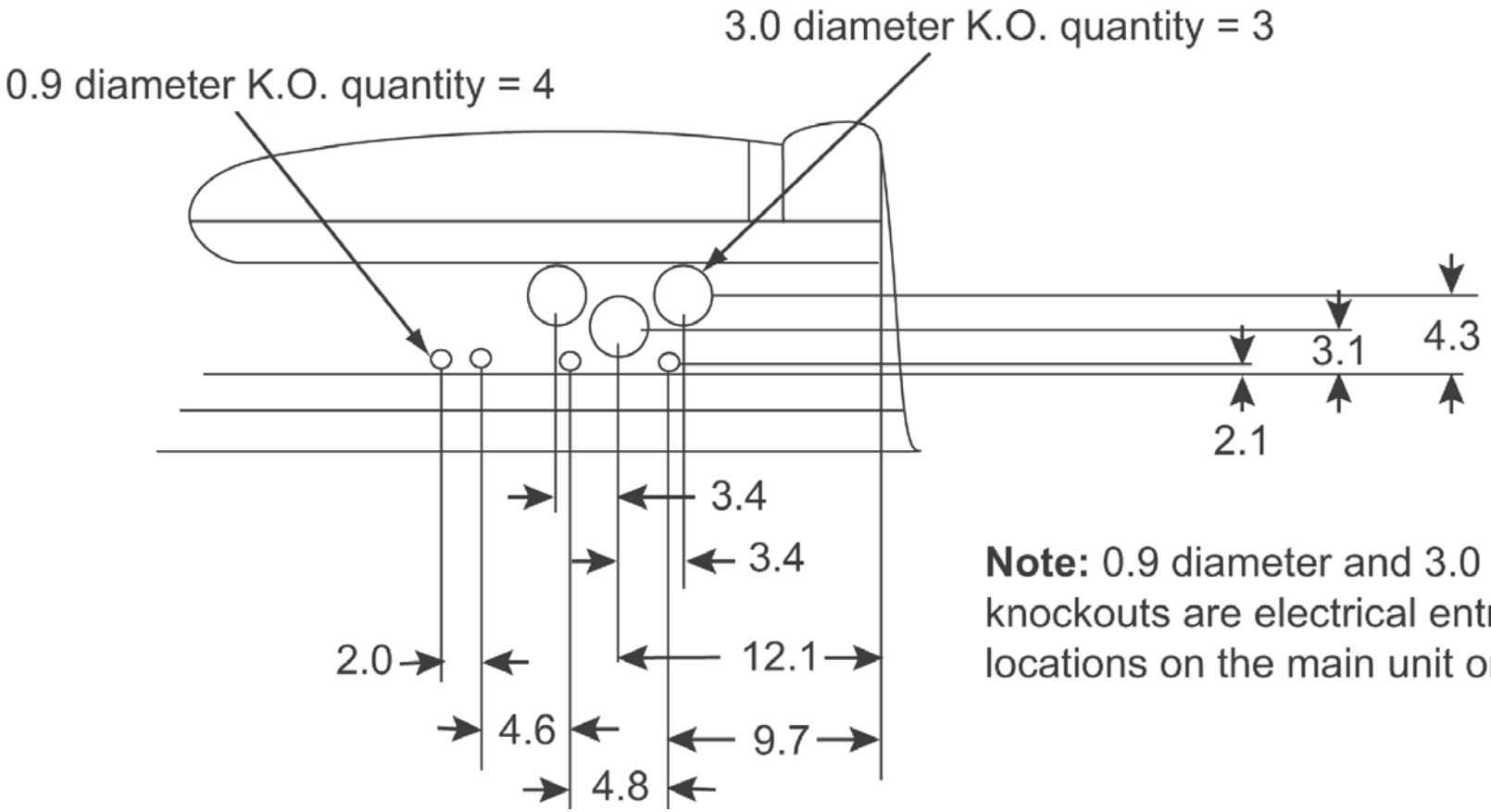
Dimensions		
Description	**Letter**	**Dimensions (in)**
Curb Length	A	305.6
Condenser Rail	B	99.0
Return Air Opening Length	C	85.0
Supply Air Opening Length	D	85.0
Return Air Opening Width	E	87.0
Supply Air Opening Width	F	81.0
Condenser Rail Overhang	G	5.0
Condenser Rail Overhang	H	5.0
Return Air Opening Location	J	3.0



Note:
Curb must be installed level.

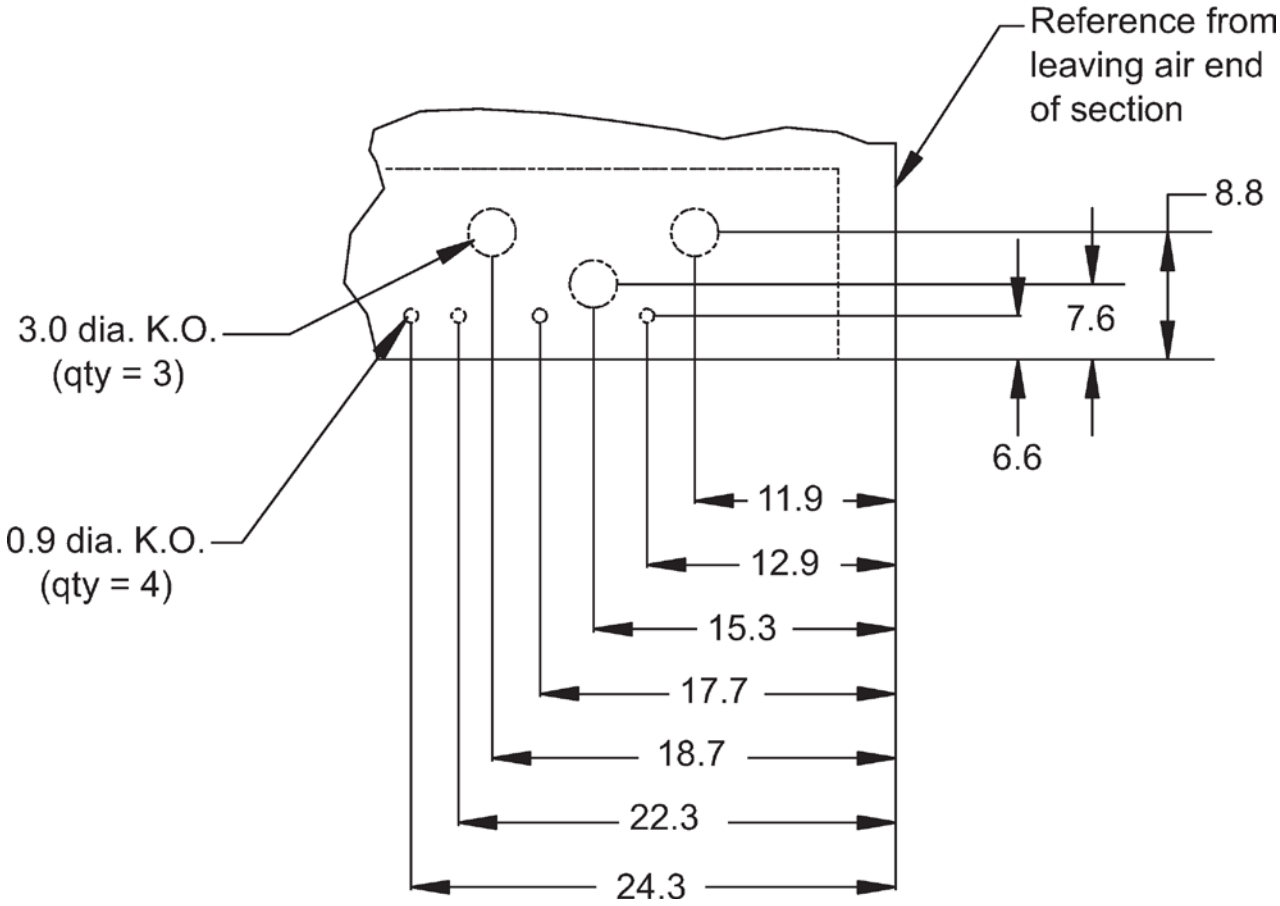
Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: (in)	www.DaikinApplied.com Software Version: 07.91

Roofcurb Knockout medium large box_Drawing for AC-23A,23B,23C,23D,23E,23F



Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Unit Knockout, Large Box_Drawing for AC-23A,23B,23C,23D,23E,23F



Product Drawing	Unit Tag: AC-23A,23B,23C,23D,23E,23F			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: RPS091D	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 07.91

Technical Data Sheet for Restrooms 100% OSA

Job Information	*Technical Data Sheet*
Job Name	122313 - Blackhall Studios
Date	2/2/2022
Submitted By	Adrian Miramontes
Software Version	09.70
Unit Tag	Restrooms 100% OSA -1, AC-1B, AC-2B, AC-3B, AC-4B, AC-5C, AC-5D, AC-10B, AC-11B, AC-12B, AC-13B, AC-14B, AC-15B, AC-16B, AC-17B, AC-18C, AC-18D, AC-19B
FPA#	TBD

Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	EER@95/75 EAT & 200 CFM/ton		ISMRE Per AHRI 920-2016
			EER	IEER	
DPS006A	460/60/3	71118	11.3	Not Available	ASHRAE 90.1-2016 compliant

Unit

Model Number:	DPS006A
Model Type:	Cooling
Heat Type:	Gas
Hot Gas Reheat:	MHGRH with Field Provided Humidity Sensor
Energy Recovery:	None
Application:	Constant Volume (100% OA; VAV capable SAF)
Controls:	Microtech III
Outside Air:	100% Outside Air
Altitude:	0 ft
Approval	cETLus

Physical

Dimensions and Weight

Length	Height	Width	Weight
67.0 in	40.8in	87.0 in	1361 lb

Corner Weights

L1	L2	L3	L4
219 lb	243 lb	473 lb	426 lb

Construction

Exterior	Insulation and Liners	Air Opening Location	
		Return	Supply
Painted Galvanized Steel	1" Injected Foam, R-7, Galvanized Steel Liner	None	Bottom

Electrical

Unit FLA	MCA	MROPD	SCCR
10.0 A	11.7 A	15 A	65 kAIC

Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.

Return/Outside/Exhaust Air

Outside Air Option

Type	Damper Pressure Drop	Exhaust Air Type
None	0.07 inH_2O	None

Technical Data Sheet for Restrooms 100% OSA

Filter Section

Physical

Type	Quantity / Size	Face Area	Face Velocity	Air Pressure Drop
2" MERV 8 & 4" MERV 14 Filters	4 / 16 in x 16 in x 2 in & 4 / 16 in x 16 in x 4 in	7.1 ft²	183.1 ft/min	0.09

DX Cooling Coil

Physical

Coil Type	Refrigerant Type	Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material
Cu Tube/ Al Fin	R410A	16	4	6.0 ft²	215.2 ft/min	0.23 inH_2O	Stainless Steel

Cooling Performance

Capacity			Indoor Air Temperature					Ambient air Temperature °F
			Entering		Leaving			
Total Btu/hr	Sensible Btu/hr	Moisture Removal lb/h	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dewpoint °F	
71118	66323	3.5	105.0	74.0	58.3	58.1	58.0	105.0

Condensate Connection Size: 3/4 in. Male NPT

Hot Gas Reheat Coil Section

Type	Face Area	Air Pressure Drop	Total Capacity	Leaving Air Temperature	
				Dry Bulb	Wet Bulb
Aluminum Tube Micro-Channel	5.5 ft²	0.03 inH_2O	16440 Btu/hr	70.0 °F	62.2 °F

Fan Section

Fan

Type	Fan Wheel Diameter	Fan Isolation
SWSI AF	14 in	None

Performance

Airflow	Total Static Pressure	Fan Speed	Brake Horsepower	Altitude
1300 CFM	2.1 inH_2O	1881 rpm	0.77 HP	0 ft

Motor				Drive
Type	Horsepower	Efficiency	FLA	Type
ECM Motor	2.3	Premium	2.3 A	Direct Drive

Gas Heat Section

Physical

Airflow	Max Allowable Burner Temp Rise	Size	Connection (Qty) Size	Heat Exchanger Material
1300 CFM	100.0 °F	80 MBH	(1) 0.5 in. Female NPT	Stainless Steel

Performance

Capacity Btu/hr	Air Temperature Dry Bulb		Air Pressure Drop inH_2O	Gas Pressure		Modulation
	Entering °F	Leaving °F		Minimum inH_2O	Maximum inH_2O	
64000	38.0	83.4	0.14	5	14	Modulating 5:1 Turndown

Technical Data Sheet for Restrooms 100% OSA

Unit Discharge Conditions

AirTemperature				
Motor Heat Btu/hr	**Moisture Removal** lb/h	**Unit Leaving Dry Bulb** °F	**Unit Leaving Wet Bulb** °F	**Unit Leaving Dewpoint** °F
2535	3.5	60.1	58.7	58.0

Minimum Airflows		
Fan Only Minimum Airflow	**Cooling Minimum Airflow**	**Heating Minimum Airflow**
429 CFM	453 CFM	590 CFM

Notes: Refer to fan curve for applicability of approximate airflows

Condensing Section

Compressor					
Type	**Quantity**	**Refrigerant Charge lb**	**Total Power**	**Capacity Control**	**Compressor Isolation**
Inverter Scroll	1	18.2	5.09 kW	Mod Control with Inverter Compressor	Rubber in Shear

Compressor Amps:	
Compressor 1	6.8 A

Compressor Options: Suction and Discharge Isolation Valves

Condenser Coil		
Type	**Fins per Inch**	**Fin Material**
Copper Tube	23	Aluminum

Coil Options: Vandal Guard

Condenser Fan Motors	
Number of Motors	**Full Load Current (Total)**
1	0.9 A

Internal Pressure Drop Calculation

External Static Pressure:	1.00 inH_2O
Filter:	0.09 inH_2O
Dirty Filter:	0.50 inH_2O
Outside Air:	0.07 inH_2O
DX Coil:	0.23 inH_2O
Hot Gas Reheat:	0.03 inH_2O
Gas Heat:	0.14 inH_2O
Total Static Pressure:	2.06 inH_2O

Sound

	Sound Power (db)							
Frequency	**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1 kHz**	**2 kHz**	**4 kHz**	**8 kHz**
Inlet	70	69	77	72	74	73	68	63
Discharge	70	72	80	77	80	79	76	71
Radiated	82	82	78	75	73	68	61	54

Technical Data Sheet for Restrooms 100% OSA

Options

Unit	
Ventilation Controls:	Outdoor Air Monitor
Electrical	
Field Connection:	Fused Power Block: 65 kAIC - 208/230/460V: 22 kAIC 575V
Powered Receptacle:	Field powered 115V GFI outlet
Power Options:	Phase Failure Monitor
Controls	
Communication Card:	BACnet/MSTP card, Factory installed

Factory Installed Sensors

Leaving Coil/Entering Fan Temperature Sensor
BACnet/MSTP Card
Discharge Air Temperature sensor – Wired in unit, mounted in supply duct
Outside Air Temperature Sensor
Dirty Filter On/Off Switch
Supply Fan Air Proving Via Modbus
Ebtron Airflow Station

Warranty

Parts:	Standard One Year
Compressor:	Additional Four Year, Five Year Total
Gas Heat Exchanger:	Standard one Year

Specials

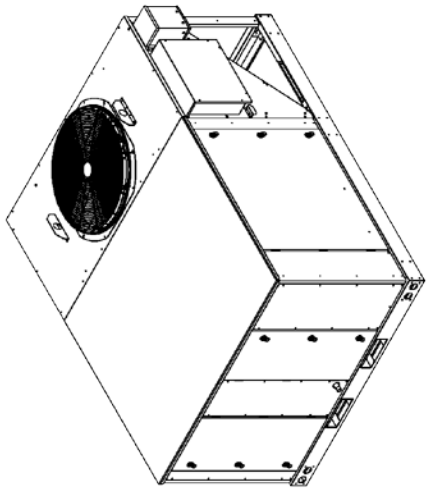
Unit	
Specials Description:	Provide stainless steel indoor coil casing. Use FPA# "Stainless"

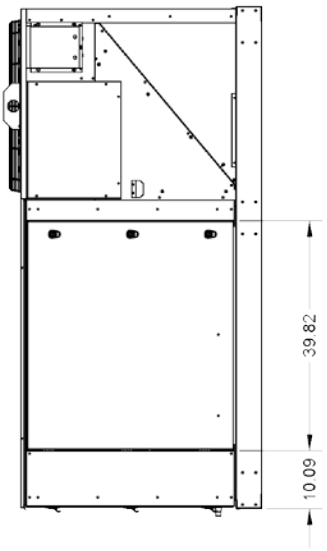
Notes

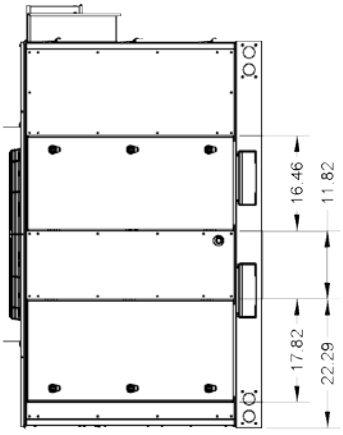
Accessories

Optional	
Part Number	**Description**
910143408	DDC Space Sensor with Setpoint Adj and Tenant Over

3-6 DoorSwing No ERW_Drawing for Restrooms 100% OSA





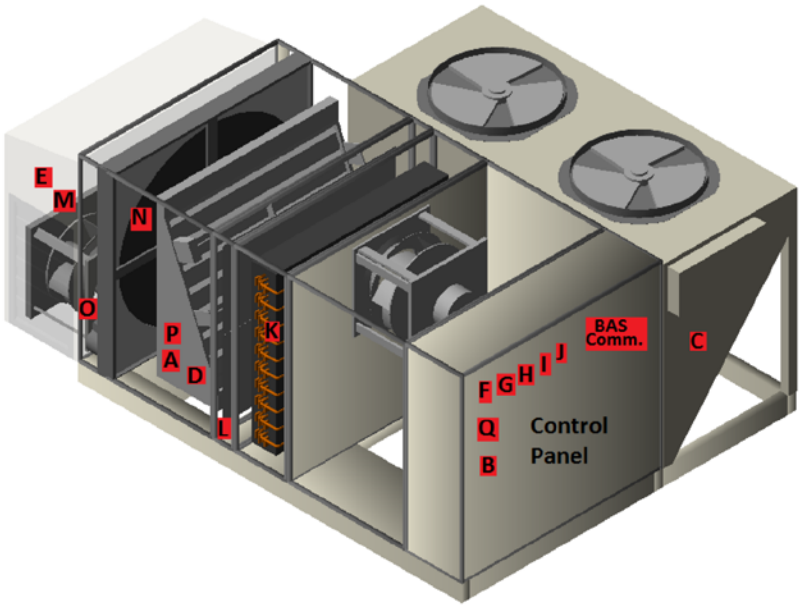


Product Drawing	Unit Tag: Restrooms 100% OSA		Sales Office: Norman S. Wright-Climatec Mechl Equip				DAIKIN
Product:	Project Name: 122313 - Blackhall Studios		Sales Engineer:				13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS006A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Cabinet AB Sensor Locations_Drawing for Restrooms 100% OSA

Rebel 3-15 Tons Factory Installed Sensor Locations[1]



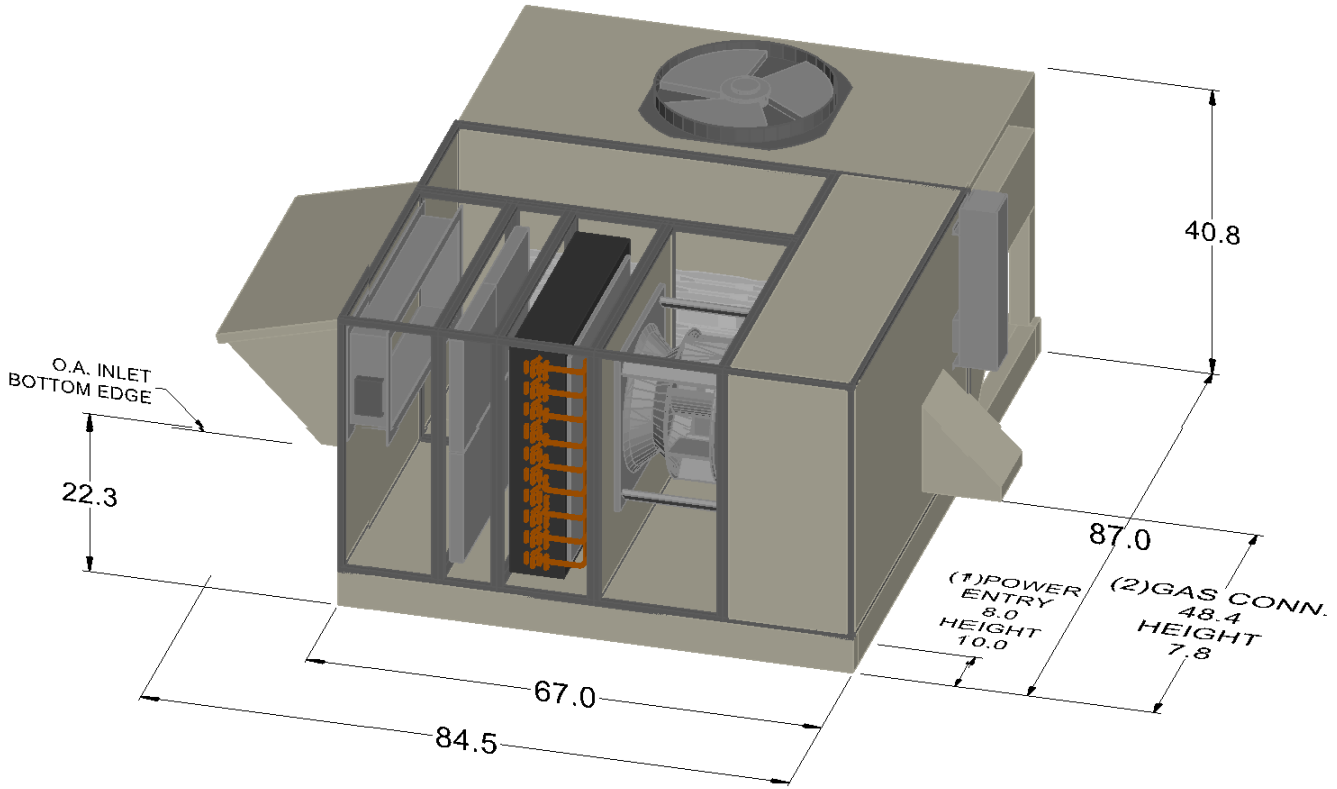
Only applies to units with factory mounted controls

SENSOR DESCRIPTION	LABEL
Return Air Temp Sensor	A
Discharge Air Temperature sensor – Wired in unit, mounted in supply duct	B
Outside Air Temp Sensor	C
Return air Enthalpy Sensor	D
Outside Air Enthalpy Sensor	E
Dirty Filter On/Off Switch	F
Supply Fan Air Proving Via Modbus	G
Duct High Limit Switch	H
Duct Static Pressure Sensor	I
Building static pressure sensor	J
Leaving Coil/Entering Fan Temp Sensor	K
BACnet/IP card	BAS Comm.
LON card	
BACnet/MSTP card	
Daikin Intelligent systems Card	
DIII Gateway Card (VRV Communication)	
Condensate Overflow Switch	L
Ebtron Airflow Station	M
Supply Leaving Wheel Temp Sensor	N
Exhaust Leaving Wheel Temp Sensor	O
Return Air Relative Humidity Sensor	P
Energy Wheel VFD	Q

1) Sensors provided are based on unit selection. Refer to unit specific technical data sheet for selection specific sensor list.

Product Drawing	Unit Tag: Restrooms 100% OSA			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS006A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com	Software Version: 09.70	
Sales Engineer:	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

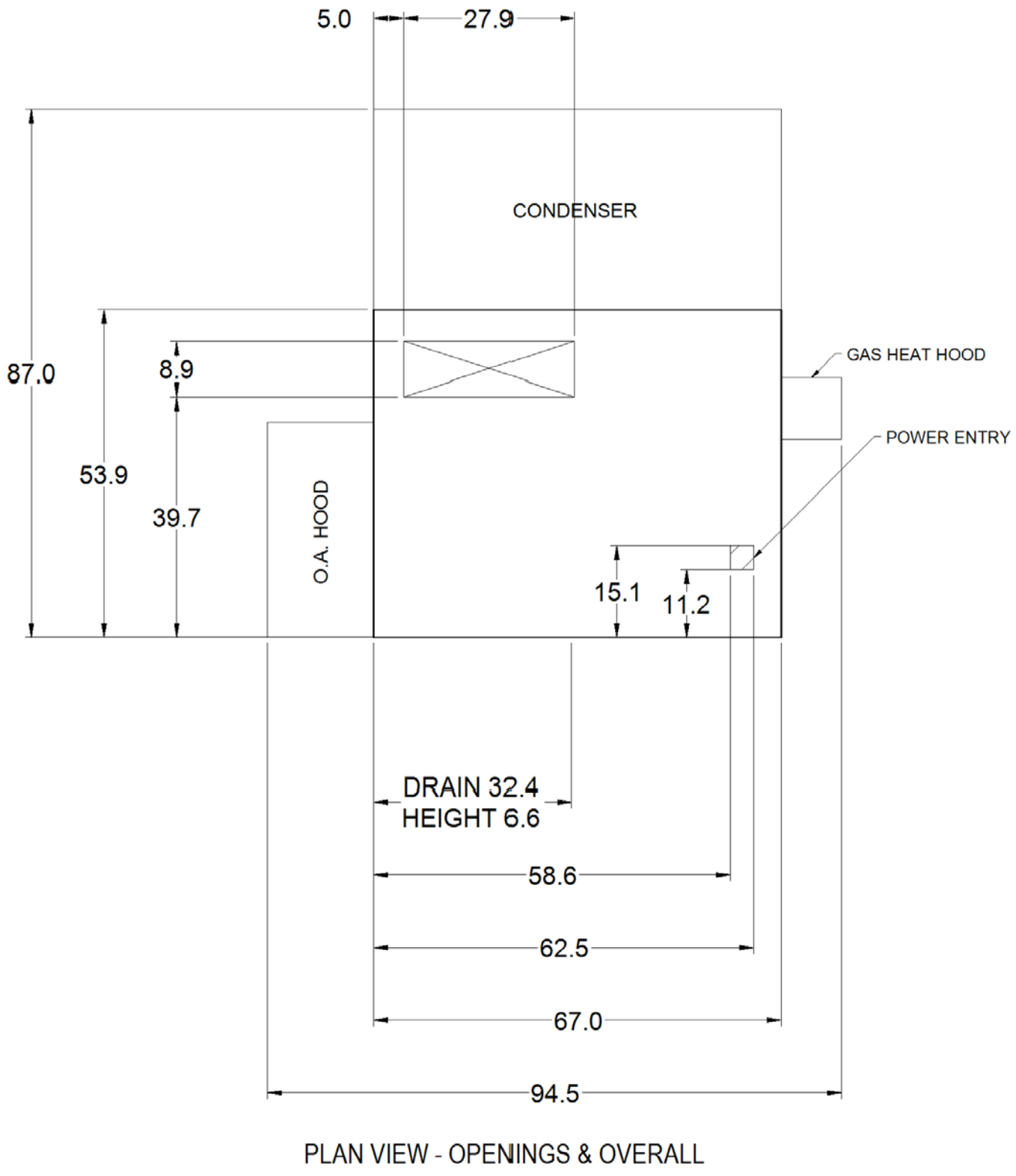
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.



Notes:
(1) Recommended location for optional field cut side power connection.
(2) Horizontal gas connection only. Gas pipe routing within the roofcurb is not available.

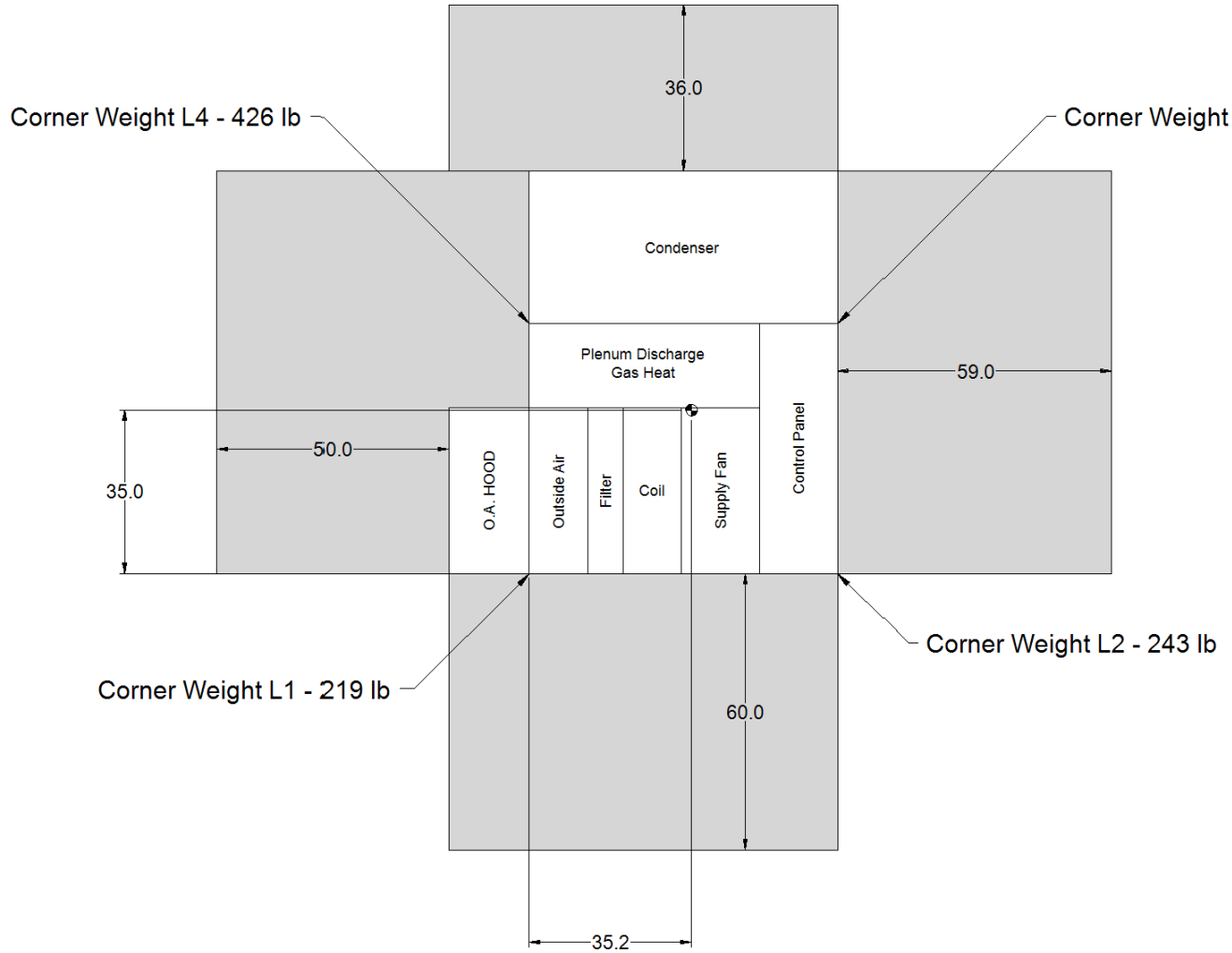
Product Drawing	Unit Tag: Restrooms 100% OSA			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS006A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

Drawings(2) for Restrooms 100% OSA



PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Unit Tag: Restrooms 100% OSA			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS006A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com	Software Version: 09.70	
Sales Engineer: SalesEngineer	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

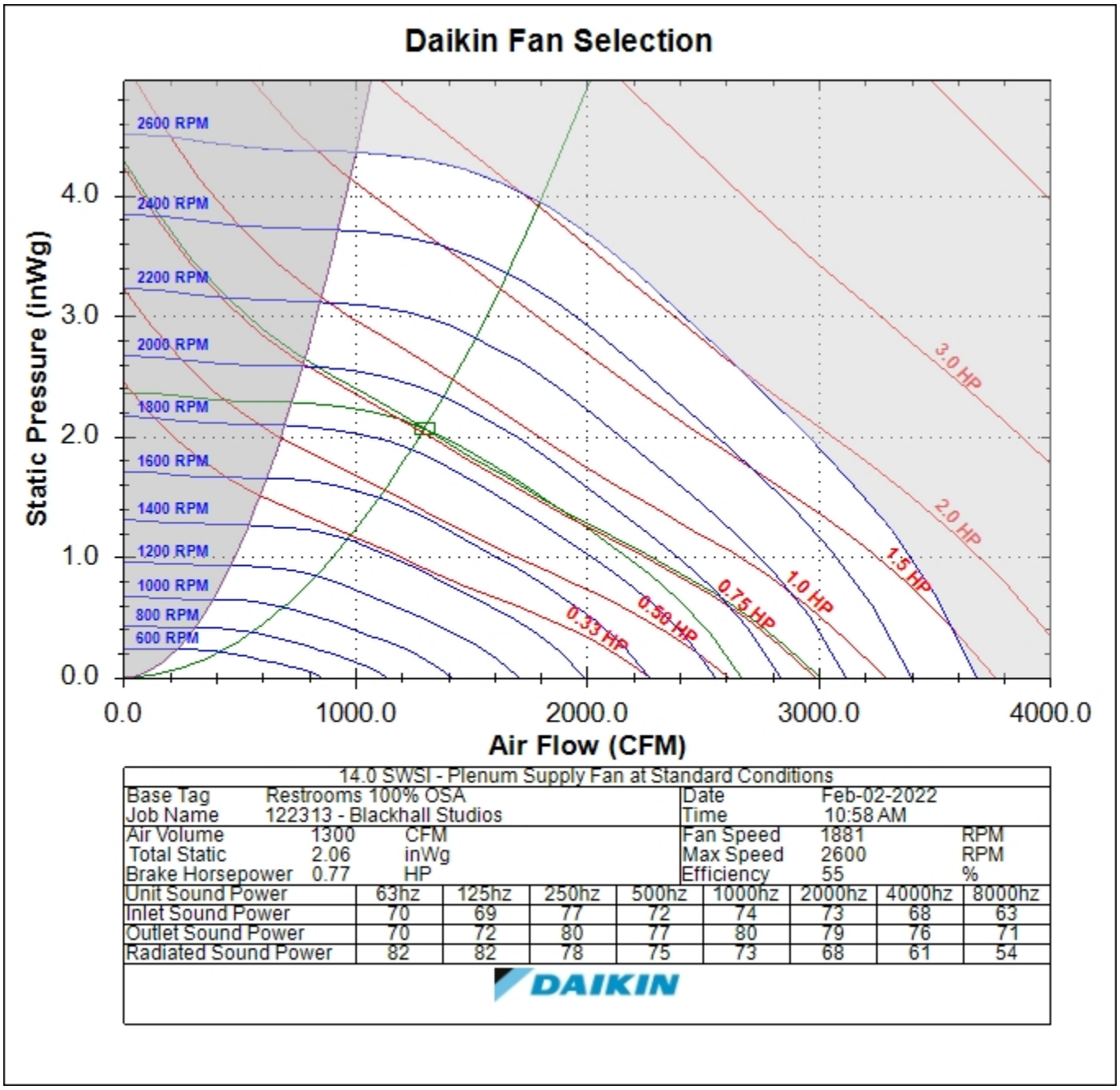


PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

Notes:
(1) Center of Gravity Height = 20.4
(2) Total Weight = 1361 lb

Product Drawing	Unit Tag: Restrooms 100% OSA			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer: SalesEngineer			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS006A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

Fan Curve - Supply for Restrooms 100% OSA



14.0 SWSI - Plenum Supply Fan at Standard Conditions

Base Tag	Restrooms 100% OSA		Date	Feb-02-2022	
Job Name	122313 - Blackhall Studios		Time	10:58 AM	
Air Volume	1300	CFM	Fan Speed	1881	RPM
Total Static	2.06	inWg	Max Speed	2600	RPM
Brake Horsepower	0.77	HP	Efficiency	55	%

Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	70	69	77	72	74	73	68	63
Outlet Sound Power	70	72	80	77	80	79	76	71
Radiated Sound Power	82	82	78	75	73	68	61	54

DAIKIN

Introduction

The space temperature sensor is designed to work with the MicroTech® III unit controller and is a 10k thermistor used to measure the space conditions.

This device is not a traditional 7-day programmable thermostat. The sensor can be used on either constant air volume (CAV) or variable air volume (VAV) applications.

On CAV systems, it acts as the control device for the heating and cooling operations for occupied and unoccupied time periods.

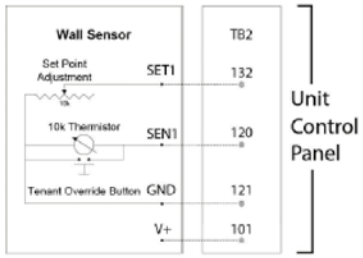
On VAV systems, it is not traditionally used as the control device but used for the unoccupied heating and cooling space sensor.

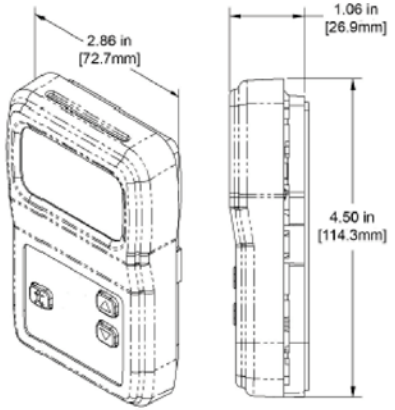
The sensor features a large format LCD display that senses the space temperature and displays the space temperature. It also has the setpoint adjustment keys to increase or decrease the setpoint. When the adjustment keys are first pressed, the display will show the current reading for the setpoint. Further pressing of these keys will change the setpoint value.

The sensor also has a tenant override button. Pressing this will initiate the tenant override sequence at the MicroTech III controller.

Specifications

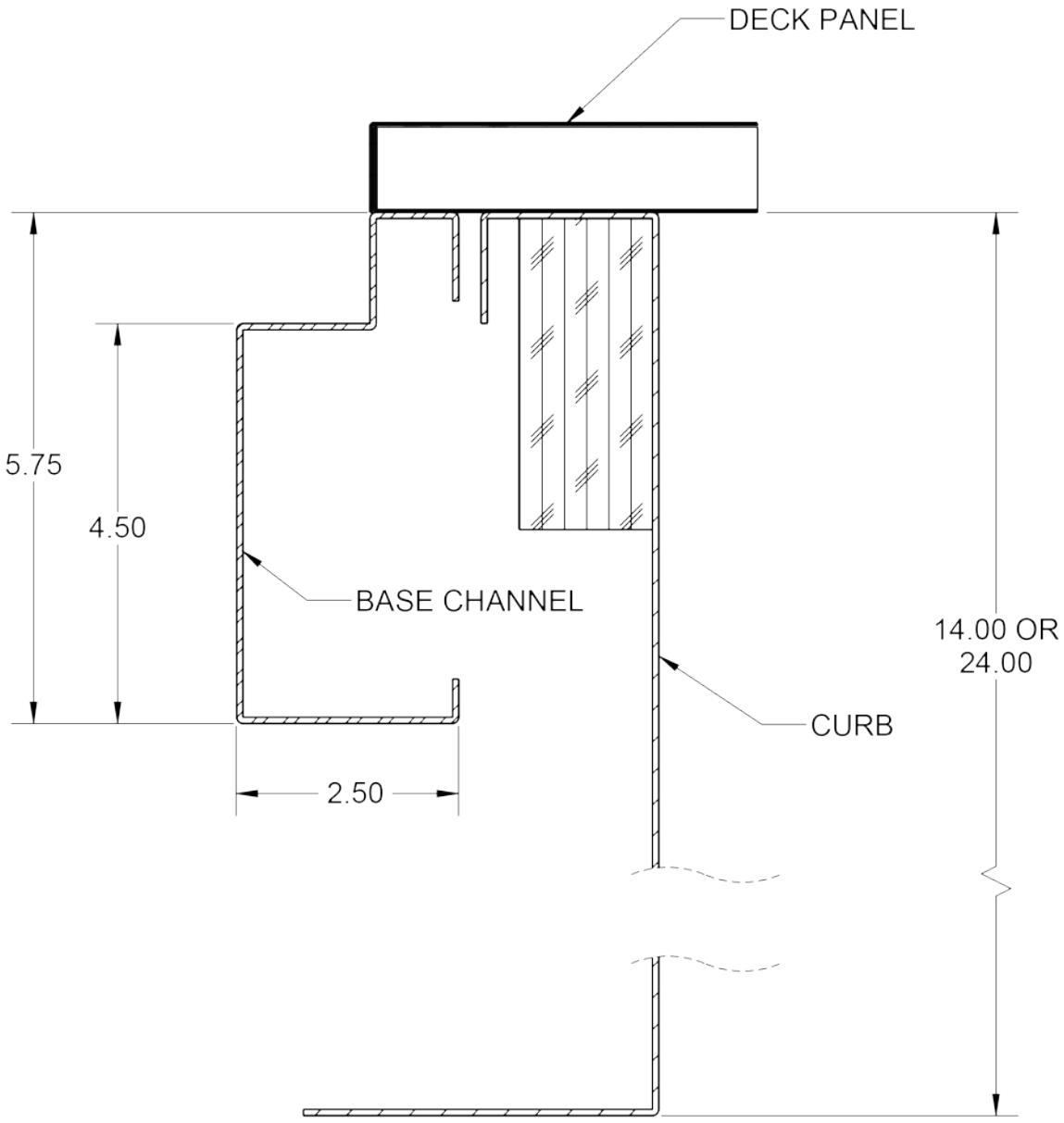
Daikin Part Number	910143408
Power	15 to 28 VAC (924 VAC nominal)
Power Consumption	0.17 VA maximum AC
Wiring	See Terminal section, page 3
Display	LCD – 3.5 digits @ 0.6 inch H
	Temperature display units — 0.1°(F/C) increments
	Setpoints in 0.5° steps
Button Options	Setpoint Up/Down buttons
	Tenant Override button
Environmental Ambient	Temperature – 32 to 122°F (0–50°C)
	Humidity – 0 95% RH non-condensing
Material	ABS plastic, UL94V-0





Product Drawing	Unit Tag: Restrooms 100% OSA			Sales Office: Norman S. Wright-Climatec Mechl Equip			DAIKIN
Product:	Project Name: 122313 - Blackhall Studios			Sales Engineer:			13600 Industrial Park Blvd. Minneapolis, MN 55441
Model: DPS006A	Feb. 02, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	www.DaikinApplied.com Software Version: 09.70

Small and Medium Cabinet Rebel Base Rail_Drawing for Restrooms 100% OSA



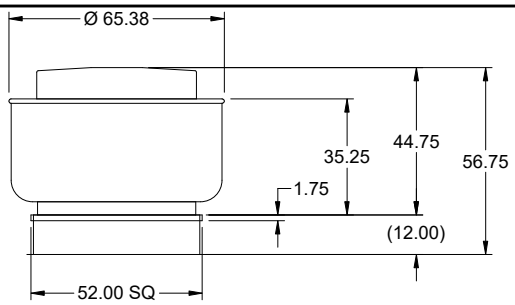
Product Drawing	Unit Tag: Restrooms 100% OSA			DAIKIN		
Product:	Project Name: 122313 - Blackhall Studios			13600 Industrial Park Blvd. Minneapolis, MN 55441		
Model: DPS006A	Sales Office: Norman S. Wright-Climatec			www.DaikinApplied.com	Software Version: 09.70	
Sales Engineer:	Feb. 02, 2022	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

Document Summary Page

Model: CUBE-420-75

Belt Drive Upblast Centrifugal Roof Exhaust Fan



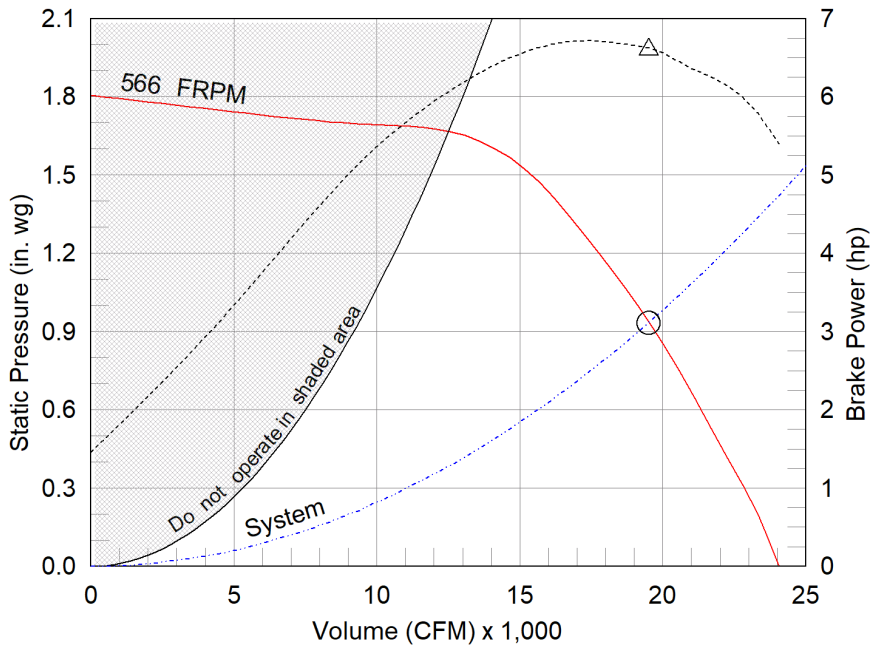
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	408
Weight w/ Acc's (lb)	440
Weight w/ Acc's and Curb (lb)	497
Max T Motor Frame Size	215
Standard Curb Cap Size (in.)	52 x 52
Optional Damper (in.)	42 x 42
Roof Opening (in.)	44.5 x 44.5

Performance	
Requested Volume (CFM)	19,500
Actual Volume (CFM)	19,500
Total External SP (in. wg)	0.935
Fan RPM	566
Operating Power (hp)	6.61
Elevation (ft)	325
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.074
Drive Loss (%)	3.7
Tip Speed (ft/min)	6,262
Static Eff. (%)	45

Misc Fan Data	
Fan Eff. Index (FEI)	1.09
Outlet Velocity (ft/min)	2,169
FEI based on default motor calculation showing lowest efficiency option, for motor specific calculations please contact factory.	

Motor	
Motor Mounted	Yes
Size (hp)	7 1/2
Voltage/Cycle/Phase	460/60/3
Enclosure	ODP
Motor RPM	1725
Efficiency Rating	NEMA Premium
Windings	1
NEC FLA* (Amps)	11
Min. Circuit Ampacity (MCA)	13.75
Max. Overcurrent Protection (MOP)	20
Short Circuit Current Rtg (SCCR)	5 kA



△ Operating Bhp point
◯ Operating point at Total External SP
Fan curve
System curve
Brake horsepower curve

Static Pressure Calculations

External SP	0.75 in. wg
Damper	0.185 in. wg
Total External SP	0.935 in. wg

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	84	92	86	80	76	73	66	61	83	72	22

Notes:

All dimensions shown are in units of in.
*NEC FLA, MCA and MOP are for reference only – based on tables 430.248 or 430.25 of National Electric Code 2020. Actual motor FLA may vary, for sizing thermal overload, consult factory. MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc).
LwA - A weighted sound power level, based on ANSI S1.4
dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International
Sones - calculated using ANSI/AMCA 301 at 5 ft
The motor provided on this fan is inverter ready and meets NEMA MG1 Part 31.4.4.2

Model: CUBE-420-75

Belt Drive Upblast Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined aluminum wheel - Curb cap with prepunched mounting holes - Motor and drives isolated on shock mounts - Drain trough - Ball bearing motors - Adjustable motor pulley - Adjustable motor plate - Fan shaft mounted in ball bearing pillow blocks - Bearings meet or exceed temperature rating of fan - Static resistant belts - Corrosion resistant fasteners - Internal lifting lugs

Selected Options & Accessories:

NEMA Premium Efficient Motor - meets NEMA Table 12-12
Motor VFD Rated with Shaft Grounding Protection
Motor with Shaft Grounding
Standard Curb Cap Size - 52 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Foam Curb Seal (Factory Applied)
Bearings with Grease Fittings, L10 life of 100,000 hrs (L50 avg. life 500,000 hrs)
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, WD-100-PB-42X42, Gravity Operated, Not Coated

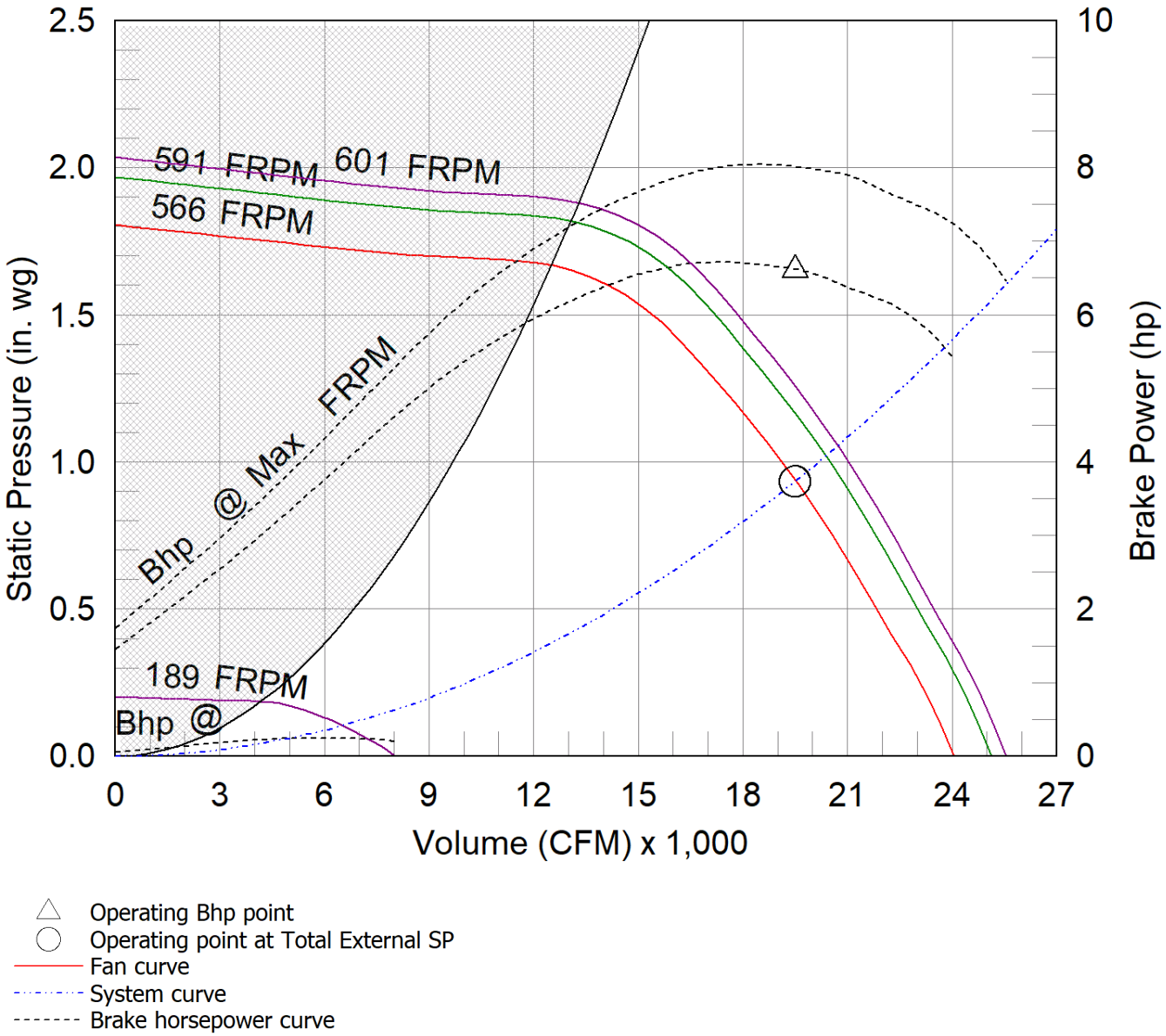
Selected Sub Marks

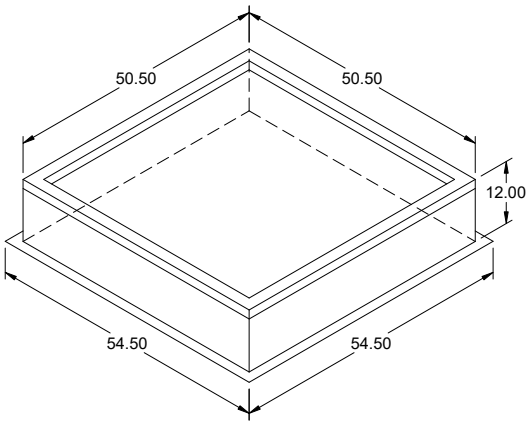
See individual submittals for full details
GPI-52-G12

CUBE-420-75 Min/Max Fan Curve

Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
19,500	19,500	0.935	566	6.61





Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled
	1	GPI-52	Nominal	1.5	57	Yes

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
12	52	52	50.5	50.5	47	47	54.5	54.5	51	51

*May not be applicable

Accessories

Material	Security Bars	Liner	Insulation (in.)
Galvanized	No	No	1