Waynflete Lower School | 2017-0080

Austin Smith

scott simons architects

05/09/18

date

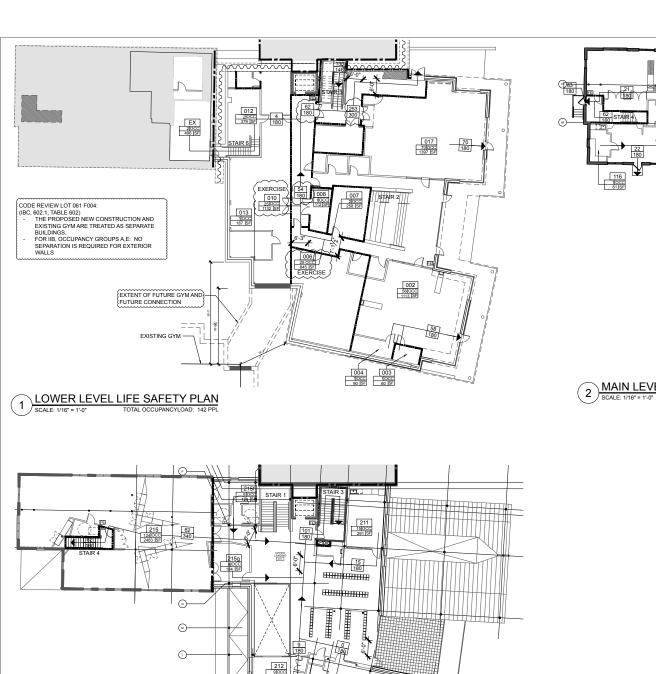
owner

| | TT SIMONS AIC d for human potential | | | | | | bulletii |
|-------------|--|-----------------------------|--|-----------------------------|-----------|------------|----------|
| ontractor | Wright Ryan Construction,Inc. | | Mandanah Comit | N D | | | |
| ulletin no | B -61 | action | Architect's Supplemental Instruction Construction Change Authorization | Status | | | |
| ssuance d | | issued by | Austin Smith | | filed | filed date | 05/09/18 |
| escription | Conversion of lower Level Store | age Rooms to Fitness | Rooms | | | | |
| ttachmen | Revised Life Safety Plan G002F Fire Alarm modification SKE-22 | | tion SKE-23, HVAC Modification SKM-08 | | | | |
| emarks: | | | | | | | |
| | | | | | | | |
| See | attached documents for the conversion o | of Lower Level Storag | e Rooms [010] and [006] to exercise room | ns | | | |
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| n acco | rdance with the terms of the | Contract Doc | uments and with the approv | al of the Owner as | required, | | |
| (a) | PRICE the above change and submit a proposal | with itemized cost and, | or credit breakdown for Owner's approval befor | e proceeding with the work. | | | |
| □ b) | PROCEED immediately to avoid or minimize de | loon to also considerate at | | | | | |
| | On a time and materials basis OR | , | | | | | |
| □ c) | Submit an itemized cost breakdown | of labor and materials | showing either credit or extra for Owner's review | | | | |
| | PROCEED at no increase in time or contract sum | n with the above clarific | ations or supplemental instructions. | | | | |
| | | | | | | | |

date

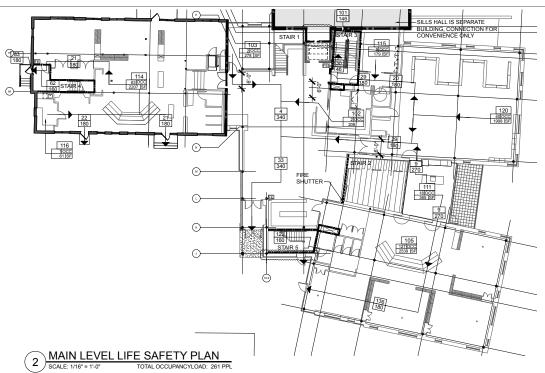
date

contractor



205 122 OCC 2443 SF

3 UPPER LEVEL LIFE SAFETY PLAN
SCALE: 1/16" = 1'0" TOTAL OCCUPANCYLOAD: 285 PPL



LIFE SAFETY PLAN LEGEND

SEE A101 FOR PARTITION TYPES

FIRE EXTINGUISHER

2-HOUR RATING

OCCUPANT EGRESS LOAD AT DOOR
DOOR OCCUPANT CAPACITY
DIRECTION OF EGRESS

1-HOUR FIRE RATED SEPARATION WITH 1 HOUR OPENINGS

SMOKE SEPARATION WITH 20 MINUTE OPENINGS

SMOKE SEPARATION WITH 20 MINUTE OPENINGS

CODE SUMMARY

APPLICABLE CODES

Maine Uniform Building and Energy Code "MUBEC" Consists of the following applicable codes:

2009 International Building Code (IBC)
2009 International Existing Building Code (IEBC)
2009 International Existing Building Code (IEBC)
2009 International Energy Conservation Code (IECC)
2009 ASHRAE 62.1 (Wentilation for Acceptable Indoor Air Quality)
2007 ASHRAE9.0.1 - (Energy Standard for Buildings except Low-Rise Residential Buildings) editions without addenda.
E-1465-2006, Standard Practice for Radno Control Options for the Design and Construction of New Low-Rise Residential Buildings.
Maine State Internal Plumbing Code based on the 2009 Uniform Pluming Code
State of Maine Subsurface Wastewater Disposal Rules Version dated: Jan 18, 2011
2011 National Electrical Code (NEC)

Portland City Code, Chapter 10: Fire Prevention and Protection

Fire/ Life Safety

NFPA Life Safety Code as adopted by the State of Maine Including but not limited to:

2009 NFPA 001: Fire Code 2009 NFPA 101: Life Safety Code 2016 NFPA 13: Installation of Sprinkler Systems, [2010 Edition through Equivalency]

2010 ADA Standards for Accessible Design

NOTE: All Codes shall include changes/amendments by the State of Maine

OCCUPANCY CLASSIFICATION (IBC Sec 302, 303, 304, 508.2) (NFPA 101)

Assembly A-3
Business B [Accessory Occupancy <10% of building area]
Educational E
Storage S-1, S-2

AUTOMATIC SUPPRESSION SYSTEM

Automatic sprinkler system provide per NFPA 13 throughout

GENERAL BUILDING INFORMATION AND ALLOWABLE BUILDING HEIGHTS AND AREA (IBC Chapter 5, Table 503) (NFPA)

Building Height (To mid-height of the roof) - 2 Stories Total Area 35,079 Perimeter 469'

Allowable Building Height 55' Maximum + 20' (Sprinkler Benefit) = 75' 2 Stories Maximum + 1 (Sprinkler Benefit) = 3 Stories

| | OCCUPANCY (PER IBC CHAPTER 3) | TYPE (PER IBC | ALLOWABLE AREA (IBC TABLE 503 MODIFIED PER IBC 506) | ACTUAL AREA NEW | ACTUAL AREA RENOVATED | | |
|-----------------------|-------------------------------------|---------------|---|--------------------|--------------------------|--|--|
| LOWER LEVEL | | | 9,500 TABULAR | 9,426 NEW | 955 RENO. | | |
| | A-3 | IIB | 28,000 ALLOWABLE | | | | |
| GROUND FLOOR LEVEL | | | 9,500 TABULAR | 10,495 NEW | 3,193 RENO. | | |
| | A-3 | IIB | 28,000 ALLOWABLE | | | | |
| UPPER FLOOR | | | 9,500 TABULAR | 8,058 NEW | 2,952 RENO. | | |
| | A-3 | IIB | 28,000 ALLOWABLE | | | | |

Building Area Modifications

Automatic Sprinkler Increase (IBC 506.3) Taken; 200% Increase

REQUIRED OCCUPANCY SEPARATIONS

REQUIRED OCC (IBC Table 508.4) (NFPA) A-3 + E (None) A,E to B 1 HR A,E to S-1 1 HR A,E to S-2 O HR

TYPES OF CONSTRUCTION

(IBC Table 601, Sec 602) (NFPA 220) Type IIB

FIRE RESISTIVE RATINGS

| (IBC Table 601), (NFPA Table A.8.2.1.2) | | | |
|---|---|----------|------------|
| | | TYPE IIB | II (0,0,0) |
| | STRUCTURAL FRAME | 0 | 0 |
| | BEARING WALLS, EXTERIOR AND INTERIOR | 0 | 0 |
| | NON-BEARING WALLS AND PARTITIONS, EXTERIOR NON-BEARING WALLS AND PARTITIONS, INTERIOR | 0 | 0 |
| | FLOOR CONSTRUCTION AND SECONDARY MEMBERS | 0 | 0 |
| | ROOF CONSTRUCTION AND SECONDARY MEMBERS | 0 | 0 |

OCCUPANCY LOAD

(REC Table 1004.1.1), (NFPA 101 Table 7.3.1.2)

100 Gross Sqft per Occupant

Occupant (IBC Table 1004.1.1), (INFI
Business B
Assembly A-3
Classroom
Daycare
Gym
Exercise Rooms
Locker Rooms
Accessory Storage
Mechanical
Stage
Storage 35 Net Sqft per Occupant

so Net Sqft per Occupant
7 Net Sqft per Occupant
50 Gross Sqft per Occupant
50 Gross Sqft per Occupant
300 Gross Sqft per Occupant
300 Gross Sqft per Occupant
15 Net Sqft per Occupant
300 Gross Sqft per Occupant

MEANS OF EGRESS (IBC Chapter 10, NFPA 101 Chapter 7,14,15)

EGRESS WIDTH PER OCCUPANT

(IBC 1005.1) (IEBC Table 1301.6.11(1))

0.3 Inches per occupant for stairways 0.2 Inches for other egress components

STAIRWAY WIDTH

GIAIRWAT WILLIAM
(IEBC 1301.6.11), (NFPA 101 Table 7.2.2.2.1.2(B), 7.3.3.1,2)
0.3 Inches per occupant
44 inch width min. for <2000 yet >50

| | NO. OCC. | WIDTH REQUIRED | WIDTH PROVIDED |
|---------|----------|-------------------------------|-------------------|
| STAIR 3 | 130 | x .3 = 39 in or 44 in min. | 44 in |
| STAIR 4 | 62 | x .3 = 19 in or 44 in min. | 48 in |
| STAIR 5 | 122 | x .3 = 37 in | 48 in |
| STAIR 6 | 2 | x .3 = .6 in or 36 in min. | 42 in |

EXIT ACCESS

Corridor Fire Resistance

(IBC 1018.1) 1 hour

Corridor Width (IBC 1018.2), (NFPA 101 14.2.3.2)

Dead-End Corridor (IEBC 705.6) Dead-end corridors in occupancy E ≤50' Dead-end corridors in occupancy A-3 ≤20' (NFPA 101 ±42.6.3, talke A,7) Travel distance to exit: 200'

SITE ACCESS - Elevator Access

WAYNFLETE LOWER SCHOOL ADDITION & RENOVATIONS

scott simons/architects

75 York Street Portland, Maine 04101

simonsarchitects.com 207.772.4656

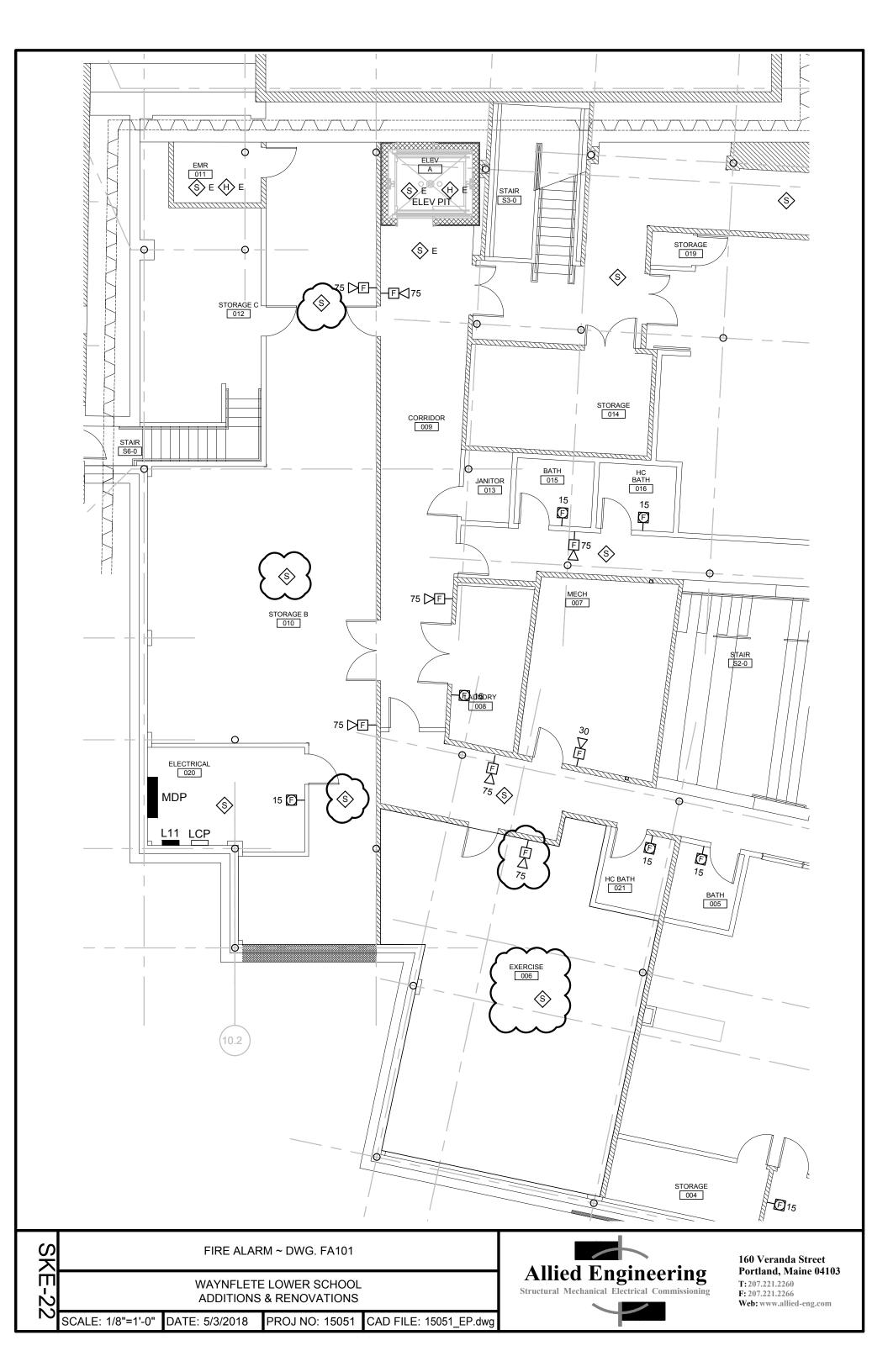
WAYNFLETE SCHOOL 360 SPRING STREET PORTLAND, MAINE 04102

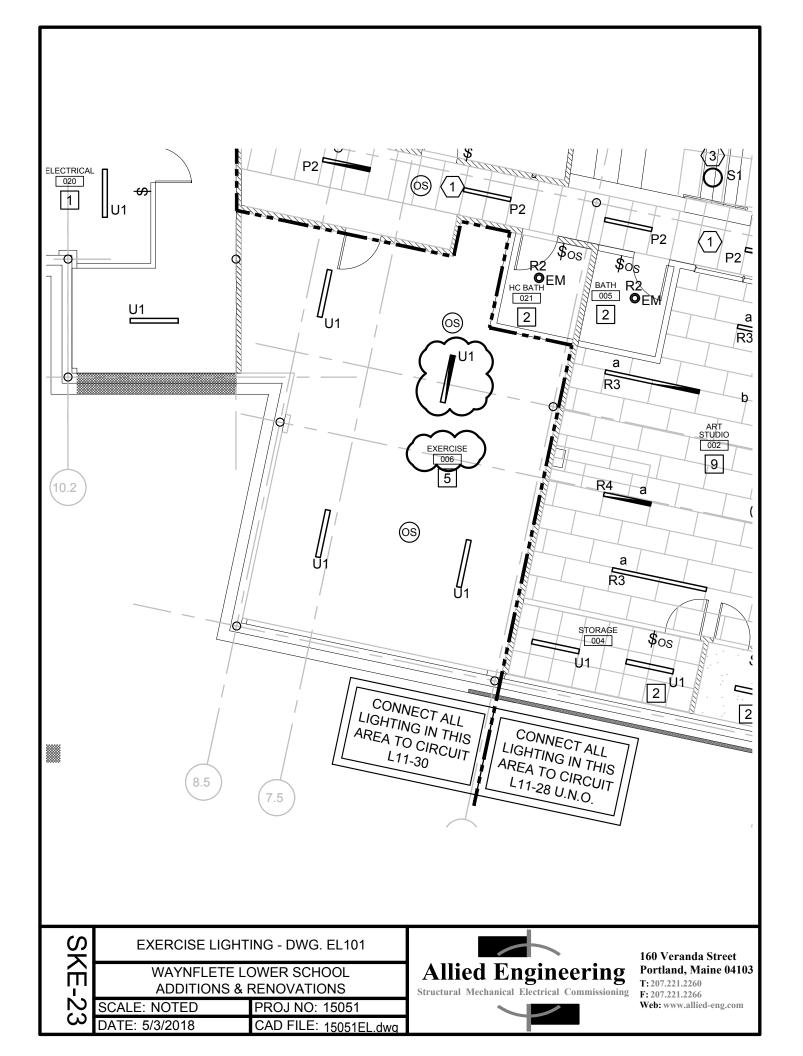


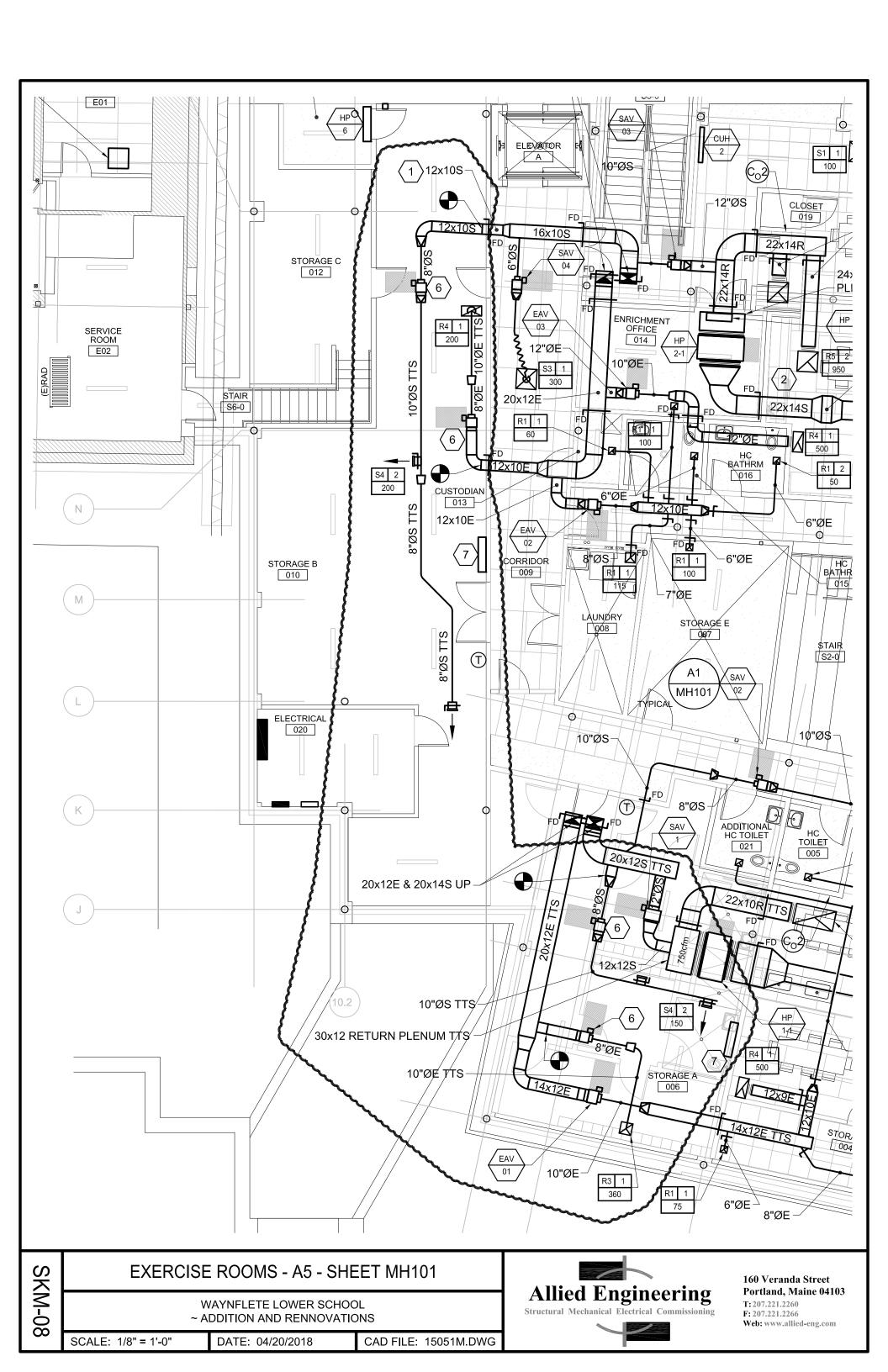
| 2016 © SCOTT SIMONS ARCHITECT | |
|-------------------------------|-----------|
| REVISION: | |
| 1 | DATE |
| 2 | DATE |
| 3 | DATE |
| 4 | DATE |
| 5 | DATE |
| 6 | DATE |
| | |
| DATE OF ISSUE: | |
| PROJECT NUMBER: | 2013-0050 |
| | |

LIFE SAFETY PLAN + CODE SUMMARY

G002R







KEYED NOTES:

6

(1) 12x10S & E CAPPED FOR FUTURE CONNECTION.

 $\fbox{2}$ RECIRCULATING RANGE HOOD (BY DIVISION 11).

 $\left\langle 3 \right\rangle$ KILN OUTLET HOOD SHALL BE 3'-0" MINIMUM ABOVE GRADE.

 $\overline{\langle}\,4\,\overline{\rangle}$ MOUNT TOP OF GRILLE 1'-0" BELOW FINISHED CEILING.

 \langle 5 angle TRANSITION 22x14S TO 32x10S BELOW BEAM.

6 PRICE MODEL SDV5-8, TYPICAL OF 4.

7 2-TON DUCTLESS SPLIT AT 9'-0" A.F.F. +/-. ROUTE CONDENSATE TO SINK TRAP. SEE ATTACHED CUT SHEET.

REVISED KEYED NOTES ~ A5 - SHEET MH101 - EXERCISE ROOMS

WAYNFLETE LOWER SCHOOL ~ ADDITION AND RENOVATIONS

SCALE: 1/8" = 1'-0" PROJ N DATE: 04-20-2018 CAD FI



160 Veranda Street Portland, Maine 04103

T: 207.221.2260 F: 207.221.2266 Web: www.allied-eng.com





2.0-Ton Wall Mounted Unit FAQ24PVJU-RZQ24PVJU8

FEATURES

- Maximum piping length up to 164 ft. allows flexible placement of indoor unit
- Maximum piping height separation up to 98 ft.
- Low ambient cooling operation down to 0°F (with optional wind baffle(s))
- 10 year limited parts and compressor warranty

BENEFITS

- Quiet operation makes it ideal for many light commercial applications
- Inverter technology delivers precise temperature control and superior energy efficiency

INDOOR UNIT



OUTDOOR UNIT



PROVIDE:

- 1. WIND BAFFLES, BASE PAN HEATER, AND AVAILABLE ACCESSORIES FOR YEAR-ROUND OPERATION.
- 2. ROOF SUPPORT STANDS SIMILAR TO OTHER COND. UNITS.
- 3. WIRED REMOTE CONTROLLER DAIKIN BRC1E73

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2.0-Ton Wall Mounted Unit FAQ24PVJU-RZQ24PVJU8

| SYSTEM PERFORMANCE | | | | |
|------------------------------------|------------|----------------------------------|---|--|
| Indoor Unit Model No. | FAQ24PVJU | Indoor Unit Name: | Sky-Air Wall Mounted - P Series | |
| Outdoor Unit Model No. | RZQ24PVJU8 | Outdoor Unit Name: | Sky-Air Heat Pump ODU | |
| Rated Cooling Capacity (Btu/hr): | 23,800 | Rated Cooling Conditions: | Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75 | |
| Sensible Capacity (Btu/hr): | 18,000 | Rated Piping Length(ft): | 25 | |
| Max/Min Cooling Capacity (Btu/hr): | 1 | Rated Height Difference (ft): | 0.00 | |
| Cooling Input Power (kW): | 2.350 | Rated Heating Conditions: | Indoor (°F DB/WB): 70 / 60 Ambient (°F DB/WB): 47 / 43 | |
| SEER (Non-Ducted/Ducted): | 17.30 / | HSPF (Non-Ducted/Ducted): | 9.4 / | |
| EER (Non-Ducted/Ducted): | 10.20 / | Heating COP (Non-Ducted/Ducted): | 2.2 / | |
| Rated Heating Capacity (Btu/hr): | 27,600 | | | |
| Heating Input Power (kW): | 3.37 | | | |

| R-410A | Cooling Operation Range (°F DB): | 23 - 115 |
|--------|-----------------------------------|---|
| 5.10 | Heating Operation Range (°F WB): | 0 - 60 |
| 0.04 | Max. Pipe Length (Vertical) (ft): | 98 |
| 0 | Cooling Range w/Baffle (°F DB): | 0 - 115 |
| 164 | Heating Range w/Baffle (°F WB): | - |
| 0 | | |
| | 5.10 0.04 0 164 | 5.10 Heating Operation Range (°F WB): 0.04 Max. Pipe Length (Vertical) (ft): 0 Cooling Range w/Baffle (°F DB): 164 Heating Range w/Baffle (°F WB): |

Daikin North America LLC, 5151 San Felipe, Suite 500, Houston, TX, 77056

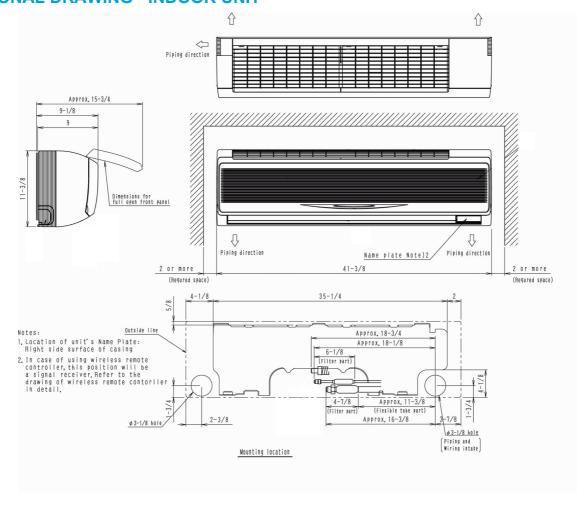
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2.0-Ton Wall Mounted Unit FAQ24PVJU-RZQ24PVJU8

| NDOOR UNIT DETAILS | | | | | |
|--|---------------------|--------------------------------|---------|--|--|
| Power Supply (V/Hz/Ph): | 208/230 / 60 / 1 | Airflow Rate (H/L) (CFM): | 635/470 | | |
| Power Supply Connections: | L1, L2, Ground | Moisture Removal (Gal/hr): | | | |
| Min. Circuit Amps MCA (A): | 0.6 | Gas Pipe Connection (inch): | 5/8 | | |
| Max Overcurrent Protection (MOP) (A): | 15 | Liquid Pipe Connection (inch): | 3/8 | | |
| Dimensions (HxWxD) (in): | 11-3/8 x 41-3/8 x 9 | Condensate Connection (inch): | 1 | | |
| Net Weight (lb): | 31 | Sound Pressure (H/M) (dBA): | 47/40 | | |
| Ext. Static Pressure (Rated/Max) (inWg): | 0/0 | Sound Power Level (dBA): | | | |

DIMENSIONAL DRAWING - INDOOR UNIT



Daikin North America LLC, 5151 San Felipe, Suite 500, Houston, TX, 77056

Daikin City Generated Submittal Data

www.daikinac.com www.daikincomfort.com

(Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications and information in this data sheet without notice and without incurring any obligations)

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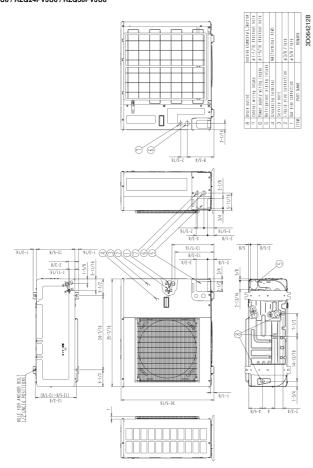
2.0-Ton Wall Mounted Unit FAQ24PVJU-RZQ24PVJU8

| OUTDOOR UNIT DETAILS | | | |
|---------------------------------------|----------------------------|--------------------------------|------|
| Power Supply (V/Hz/Ph): | 208/230 / 60 / 1 | Compressor Stage: | |
| Power Supply Connections: | L1, L2, Ground | Capacity Control Range (%): | - |
| Min. Circuit Amps MCA (A): | 16.5 | Airflow Rate (H) (CFM): | 1835 |
| Max Overcurrent Protection (MOP) (A): | 20 | Gas Pipe Connection (inch): | 5/8 |
| Max Starting Current MSC(A): | | Liquid Pipe Connection (inch): | 3/8 |
| Rated Load Amps RLA(A): | | Sound Pressure (H) (dBA): | 49 |
| Dimensions (HxWxD) (in): | 30-5/16 x 35-7/16 x 12-5/8 | Sound Power Level (dBA): | |
| Net Weight (lb): | 150 | | |

DIMENSIONAL DRAWING - OUTDOOR UNIT

RZR18PVJU8 / RZR24PVJU8 / RZR30PVJU8 RZQ18PVJU8 / RZQ24PVJU8 / RZQ30PVJU8

Unit: in.



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