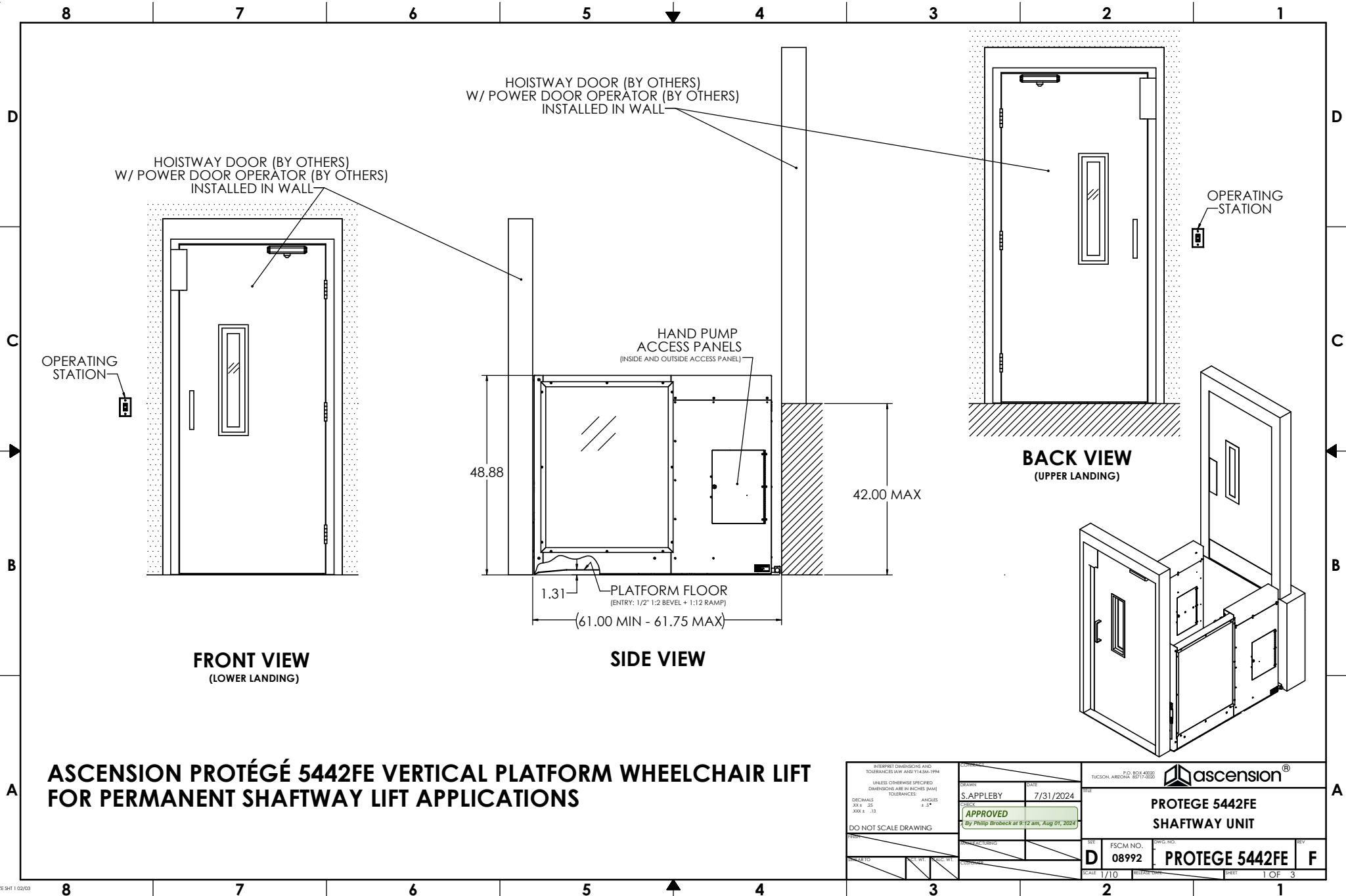
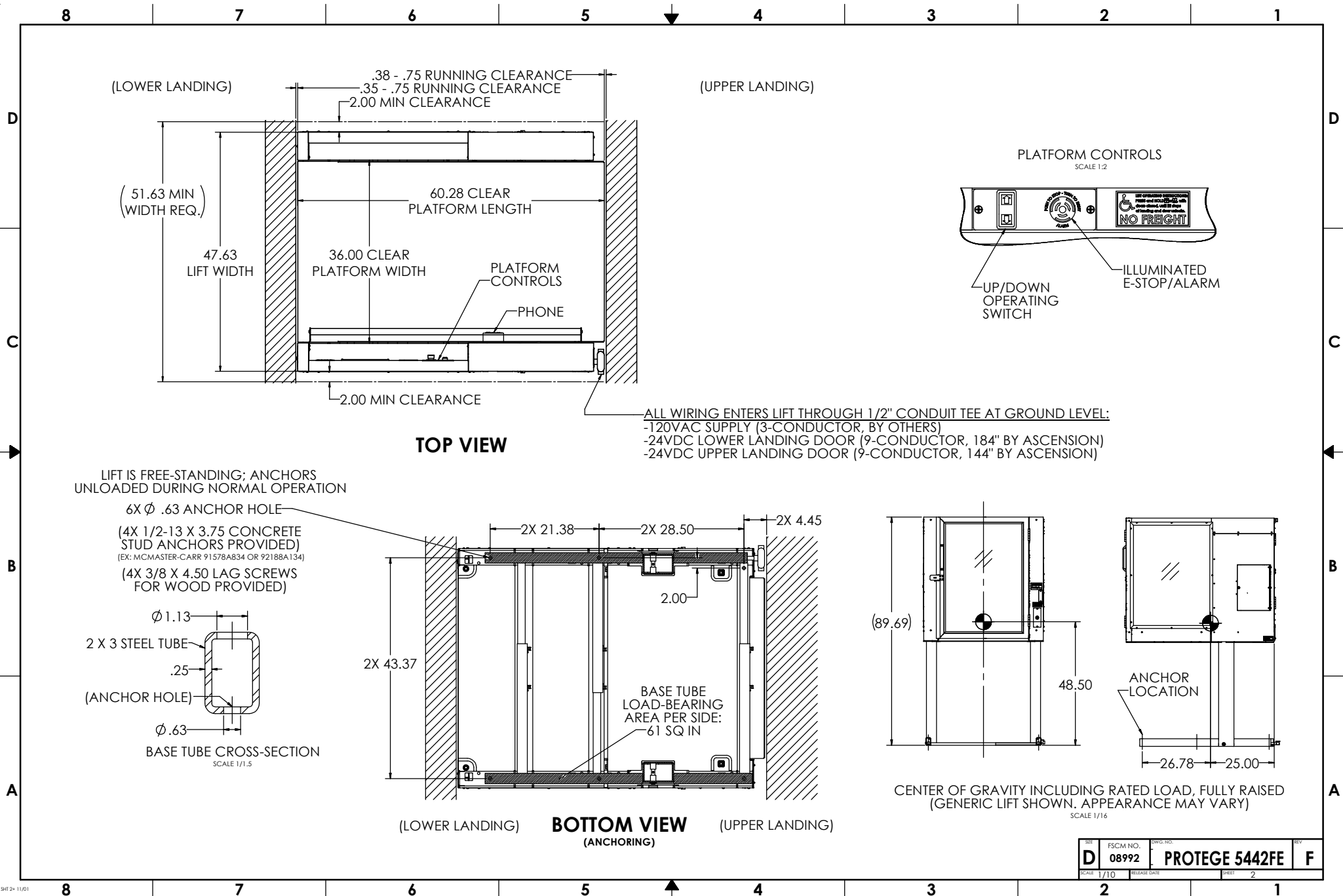


GENERIC DRAWING; CONTACT ASCENSION FOR PROJECT-SPECIFIC DRAWINGS
SEE OTHER PROTEGE LIFT MODELS (5442FG, 5442F, ETC.) FOR OTHER GATE/DOOR OPTIONS (PLATFORM/LANDING MOUNT)
SEE OPTIONS BROCHURE AND/OR SHEET 3 FOR VARIOUS CONFIGURATION OPTIONS



**ASCENSION PROTÉGÉ 5442FE VERTICAL PLATFORM WHEELCHAIR LIFT
FOR PERMANENT SHAFTWAY LIFT APPLICATIONS**

INTERPRET DIMENSIONS AND TOLERANCES (ASME Y14.5M-1994) UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (MM) DECIMALS .001 = .025 ANGLES ± .5° DO NOT SCALE DRAWING		DESIGNER S. APPLEBY DATE 7/31/2024 CHECK APPROVED By Philip Brobeck at 9:12 am, Aug 01, 2024	PROJECT PROTEGE 5442FE SHAFTWAY UNIT
SCALE 1/10	RELEASE DATE	FSCM NO. D 08992	DWG. NO. F PROTEGE 5442FE
SHEET 1 OF 3		FILE \Solidworks\01\Ascension\PROTEGE 5442FE.SLDRAW	



REV	DESCRIPTION	DATE	BY	CHKD
D	08992			
F	PROTEGE 5442FE			
SCALE	1/10	RELEASE DATE	SHEET	2

CONFIGURATION

TOTAL TRAVEL	UP TO 42.00"
ENTRY/EXIT CONFIG.	STRAIGHT THROUGH
ENCLOSURE PROVIDED	NONE (BY OTHERS)

LOWER LANDING	
DOOR TYPE	HOISTWAY DOOR (BY OTHERS)
HANDING	RH/LH
DOOR OPERATOR	YES/NO (BY OTHERS)
CALL STATION TYPE	WALL MOUNT
CALL STATION KEYED	YES/NO

UPPER LANDING	
DOOR TYPE	HOISTWAY DOOR (BY OTHERS)
HANDING	RH/LH
DOOR OPERATOR	YES/NO (BY OTHERS)
CALL STATION TYPE	WALL MOUNT
CALL STATION KEYED	YES/NO

PLATFORM	
KEY SWITCH	YES/NO
HANDS-FREE PHONE	YES/NO
AUXILIARY LIGHTING	YES/NO
GRAB BAR	STANDARD
SLIP-RESISTANT FLOOR	STANDARD

OUTDOORS	YES/NO
PIT SWITCH	STANDARD
AUDIBLE ALARM	STANDARD
UNDER-PLATFORM SAFETY PAN	STANDARD
CALIFORNIA SAFETY PAN MODIFICATION	YES/NO
ACCESS PANELS (4X)	STANDARD
HAND PUMP	STANDARD
FRONT LOWERING VALVE (FLV)	STANDARD
EXTERNAL BATTERY BACKUP UNIT (UPS)	YES/NO

SPECIFICATIONS

DESCRIPTION	SHAFTWAY VERTICAL PLATFORM WHEELCHAIR LIFT
CODE COMPLIANCE	ASME A18.1, ASME A17.5, NFPA 70 (NEC), ANSI A117.1, ADASAD (ADAAG)
APPLIED VERSION	ASME A18.1-2023
MODEL	PROTEGE 5442FE
UNIT WEIGHT	850 LB
RATED LOAD	900 LB
RATED SPEED	5 FT/MIN
DUTY CYCLE	S2: 20 MIN SINGLE RUN S3: 13% INTERMITTENT RUN
PLATFORM SIZE	36" X 58"
POWER SUPPLY	24VDC, 1.75A (42W)
CONTROL SYS.	24VDC
MOTOR	115VAC, 1/2 HP

DRIVING MEANS	DIRECT-PLUNGER HYDRAULIC
PLUNGER (2X)	1.125" SOLID
CYL. I.D.	2.75" MASTER, 2.50" SLAVE
CYL. O.D.	3.13" MASTER, 2.88" SLAVE
STROKE (2X)	41.5"
SAFETIES TYPE	NONE (IAW ASME A18.1 §2.8.8)

WORKING PSI	400 PSI
RELIEF PSI	600 PSI (1.5 X WP)

DOOR LOCKS	(SEE DOORS BY OTHERS)
------------	-----------------------

CONFIGURATION: FINISHES

LIFT COLOR (POWDER COAT)	<input type="checkbox"/> BLACK (STANDARD) <input type="checkbox"/> SILVER <input type="checkbox"/> CUSTOM: _____
HARDWARE COLOR	<input type="checkbox"/> SILVER (STANDARD) <input type="checkbox"/> BLACK <input type="checkbox"/> BRASS <input type="checkbox"/> OIL RUBBED BRONZE
WINDOWS	<input type="checkbox"/> CLEAR PLEXIGLAS (STANDARD) <input type="checkbox"/> TINTED PLEXIGLAS (30%) <input type="checkbox"/> FROSTED PLEXIGLAS <input type="checkbox"/> POWDER COATED STEEL
WINDOW ART	<input type="checkbox"/> NONE (STANDARD) <input type="checkbox"/> CUSTOM LOGO/IMAGE

PROVISIONS BY OTHERS

GENERAL

HOISTWAY: HOISTWAY MUST BE SQUARE AND PLUMB WITHIN 1/4" TO ENSURE PROPER LIFT OPERATION. SHAFT DIMENSIONS PROVIDED FOR REFERENCE ONLY. HOISTWAY MUST MEET ASME A18.1 AND ALL APPLICABLE STATE AND LOCAL CODES. HOISTWAY IS TO BE PROVIDED BY OTHERS.

DOORS: INSTALLATION OF DOORS TO MEET ALL APPLICABLE CODES. HOISTWAY DOORS TO BE PROVIDED BY OTHERS (SEE ATTACHED FOR RECOMMENDATION).

FLOOR: FLOOR BENEATH UNIT AND DOOR SWINGS MUST BE FLAT AND LEVEL WITHIN 1/8" AND CAPABLE OF SUPPORTING UNIT WEIGHT WITH RATED LOAD. OUTDOORS, DRAINAGE SHALL NOT FLOW THROUGH OR INTO UNIT.

PIT/RAMP: UNLESS OTHERWISE SPECIFIED, DO NOT PROVIDE PIT OR RAMP. LIFT DESIGNED WITH LOW-PROFILE PLATFORM FLOOR FOR DIRECT ENTRY.

OVERHEAD CLEARANCE: MUST COMPLY WITH ALL APPLICABLE CODES.

CONSTRUCTION COORDINATION: OWNER/AGENT RESPONSIBLE FOR ALL MASONRY, CARPENTRY, DRYWALL, PATCHING, AND FINISHING WORK NEEDED PRIOR TO AND FOLLOWING LIFT INSTALLATION.

ELECTRICAL

GENERAL: ALL WIRING SHALL COMPLY WITH NFPA 70 (NEC).

POWER: 120VAC, 60HZ, 13A, 1PH CIRCUIT WITH DISCONNECT (SEE BELOW).

MAIN DISCONNECT SWITCH: OTHERS SHALL PROVIDE LOCKABLE FUSED DISCONNECT SWITCH IAW NFPA 70 (SECTION 620.51).

LIGHTING: 54 LX MIN AT PLATFORM AND LANDINGS.

EMERGENCY LIGHTING: 2.2 LX MIN AT PLATFORM AND CONTROLS (4 HOURS MIN) (WHERE NOT PROVIDED BY "AUXILIARY LIGHTING" OPTION).

PHONE: STANDARD PHONE CABLE WITH RJ11 RECEPTACLE CONNECTOR REQUIRED FOR OPTIONAL (ANALOG) HANDS-FREE PHONE, WHERE PROVIDED.

INSTALLATION FEATURES

TRANSPORTABILITY: DISPOSABLE CASTERS INCLUDED TO WHEEL LIFT TO PERMANENT INSTALL LOCATION.

COMPRESSIBILITY: LIFT COMPRESSIBLE TO 33" TO FIT THROUGH DOORWAYS.

REV	FSCM NO.	DWG. NO.	REV
D	08992	PROTEGE 5442FE	F
SCALE	1/10	RELEASE DATE	SHEET 3

1. **DESCRIPTION:**

SPECIFICATIONS FOR WALL-MOUNT DOORS AND INTERLOCKS TO BE USED WITH ASCENSION WHEELCHAIR LIFTS (16S, 16C, & CERTAIN 5442F SERIES LIFTS).

2. **CODE REQUIREMENTS:**

DOOR AND INTERLOCK TO COMPLY WITH ALL APPLICABLE CODES AND REQUIREMENTS, INCLUDING ASME A18.1.

GENERAL REQUIREMENTS FOR REFERENCE ONLY:

- DOOR MUST BE SELF-CLOSING
- INSIDE OF DOOR MUST FORM SMOOTH, UNPERFORATED SURFACE FLUSH WITH SURROUNDING FACES OF ENCLOSURE/HOISTWAY
- DOOR AND INTERLOCK MUST WITHSTAND A 125 LBF APPLIED FORCE
- DOOR MUST BE FIRE-RATED (IF APPLICABLE)

3. **INTERLOCK SPECIFICATIONS:**

MECHANICAL INTERLOCK TO INCLUDE TWO (2) PARALLEL (SEPARATE) CONTACTS FOR LIFT'S DOOR CLOSED AND DOOR LOCKED SIGNAL CIRCUITS. CONTACTS TO BE CLOSED WHEN DOOR SHUT AND LOCKED.

INTERLOCK TO BE FAIL-SECURE, 24VDC, 0.5A MAX CURRENT DRAW.

(1.0A MAX CURRENT DRAW FOR PROTÉGÉ 5442F SERIES)

INTERLOCK TO BE CERTIFIED TO ASME A18.1, ASME A17.1, CSA B44, OR CSA B355.

RECOMMENDED INTERLOCK MODELS:

- IDEC HS5L (HS5L-XD44M-G OR SIMILAR)
 - AVAILABLE FROM ASCENSION
- ATLAS ATLOCK (ATLOCK-LP5 (LH), ATLOCK-RP5 (RH), OR SIMILAR)

4. **RECOMMENDED HOISTWAY DOOR MANUFACTURER & MODEL:**

BELCO DOORS

P/N: COM-316

STANDARD FEATURES:

- 1.5 HOUR FIRE RATING
- VISION PANEL
- PRIMED AND READY FOR PAINT

OPTIONS:

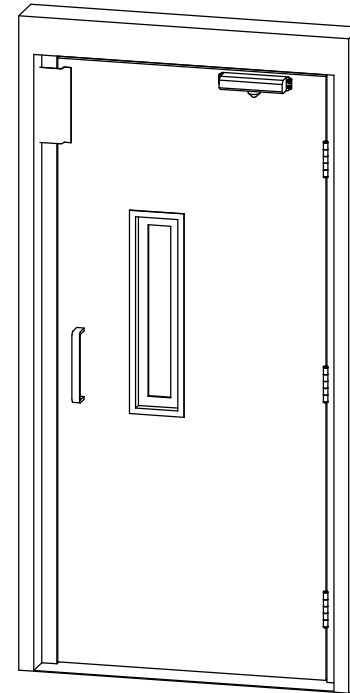
- "RH" OR "LH" HANDING
- CONCEALED POWER DOOR OPERATOR (PDO)
- OUTDOOR WEATHER PACKAGE

FIRE-RATED WOODEN DOOR OPTIONS AVAILABLE; CONTACT BELCO DOORS FOR MORE DETAILS.

WALL-MOUNT DOOR SPECIFICATIONS

FOR DOORS TO BE USED WITH ASCENSION LIFTS

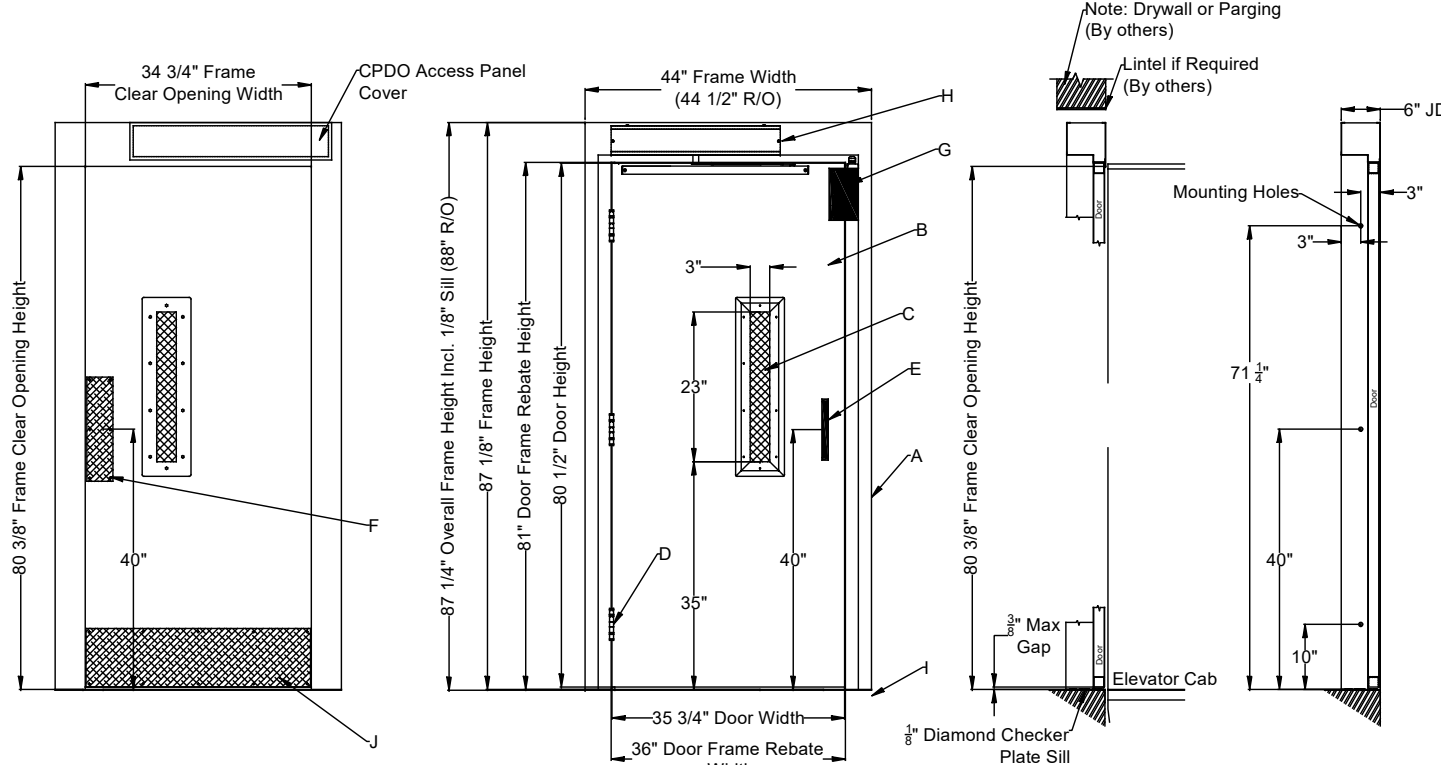
(RECOMMENDED DOOR MODEL **OPTIONALLY** PROVIDED WITH LIFT; SEE QUOTE)



DOOR APPEARANCE FOR REFERENCE ONLY
("LH" HANDING SHOWN)

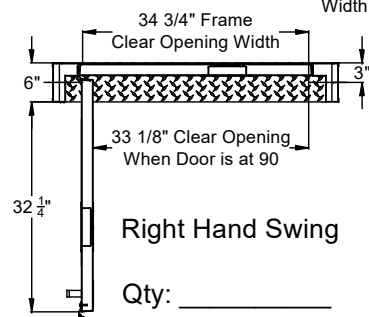
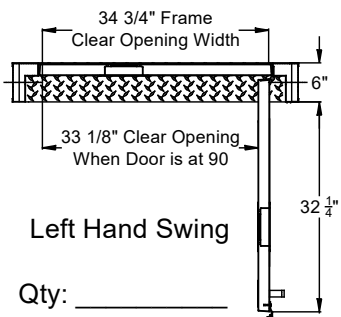
INTERPRET DIMENSIONS AND TOLERANCES (AW AND Y14.5M-1994) UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (MM) TOLERANCES DECIMALS FRACTIONS ANGLES Holes & N/A		DATE 12-30-25 S. APPLEBY CHECK APPROVED By CWillis at 12:45 pm, Jan 06, 2026	P.O. BOX 4000 TUCSON, ARIZONA 85717-0000 ascension®	
DO NOT SCALE DRAWING		WALL-MOUNT DOOR SPECIFICATIONS		
SCALE 1/8"		FSCM NO. 08992	DWG. NO. 16S DOOR	
SHEET 1 OF 1		REV C		

BELCO DOORS COM-316 ORDER FORM

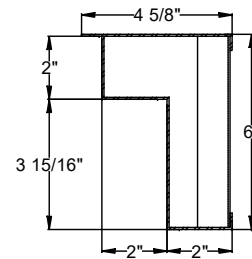


1-1/2 Hour Elevator Approved "B" Fire Label

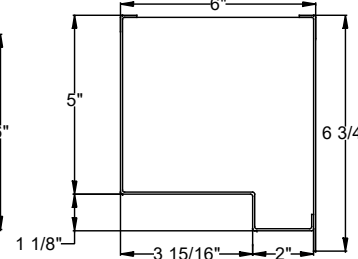
- A. 16ga. Frame (Galvanneal & Paint Ready)
- B. 18ga. Steel Door (Honeycomb Core, Galvanneal & Paint Ready)
- C. 3" x 23" Vision Panel (1/4" Wired Glass)
- D. (3) 4 1/2" NRP BB Hinges (US26D Finish)
- E. D-Handle (Brushed Aluminum)
- F. Push Plate (Brushed Aluminum)
- G. EMI Interlock (Atlas Atlock)
- H. Concealed PDO-110V (Optional)
- I. Flat Diamond Zinc Plated Sill with Sill Pins
- J. Kick Plate (Brushed Aluminum)



Side Jamb Profile



Head Jamb Profile

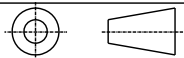


Standard Entrances are provided with a Manual Door Closer, if Power Door Operation is Required - Please Check Box Below

☐ Power Door Operation is Required

Standard Entrances are for Interior use, if Exterior Application Pkg. is Required - Please Check Box Below

☐ Exterior Application Pkg. Required



NIAGARA BELCO DOORS LTD. IS NOT RESPONSIBLE FOR THE STRUCTURAL DESIGN OF THE BUILDING AND ITS ABILITY TO SUPPORT THE ENTRANCE.

REV NO.	REVISION DESCRIPTION	DATE	BY
0	INITIAL RELEASE	2NOV22	JPH

AGM Container COM-316-3681-CPDO Size 36" x 81"			
SCALE:			
DRAWN BY:	DATE LAST MODIFIED:	DRAWING NO.	REV SHEET NO.
JPH	NOV 15 2022	COM-316-3681-CPDO	0 1 OF 1

4

3

2

1

NOTES UNLESS OTHERWISE SPECIFIED:

1. DESCRIPTION: REMOTELY LOCATED CALL STATION FOR ASCENSION VERTICAL PLATFORM WHEELCHAIR LIFT. SUITABLE FOR SURFACE OR FLUSH WALL MOUNT.
2. CHARACTERISTICS:
 - 2.1 COVER PLATE: STANDARD SIZE WALL PLATE (4.5" X 2.75"), BRUSHED STAINLESS STEEL.
 - 2.2 SWITCH: 3 POSITION ROCKER, REQUIRES CONSTANT PRESSURE TO ACTUATE.
 - 2.3 MOUNTING BOX: SURFACE MOUNT SINGLE GANG BOX 2.00" DEEP, OR PREINSTALLED FLUSH MOUNT SINGLE GANG BOX.
 - 2.4 WEATHER RATING: SUITABLE FOR OUTDOOR USE.
3. ADA REQUIREMENTS:
 - 3.1 MOUNT BETWEEN 15" AND 48" ABOVE FLOOR.
IAW ADAAG 308.2 OR 308.3
 - 3.2 PROVIDE 30"x48" OR 48"x30" CLEAR FLOOR SPACE FOR ACCESSING CALL STATION.
IAW ADAAG 309.2 & 305

NOTE: CLEAR FLOOR SPACE MUST BE OUTSIDE SWING OF AUTOMATIC DOORS AND GATES.

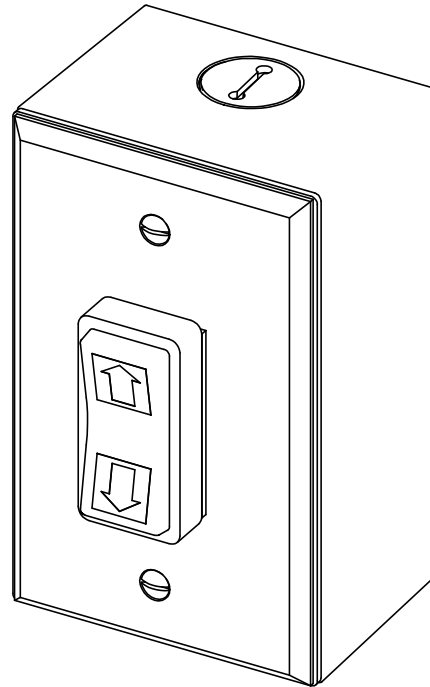
WIRING:

—• DOWN

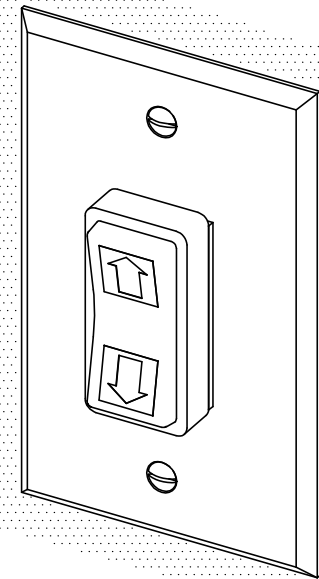
—• +V (COM)

—• UP

(3) 1/4" QUICK-DISCONNECT
TERMINALS (PROVIDED)

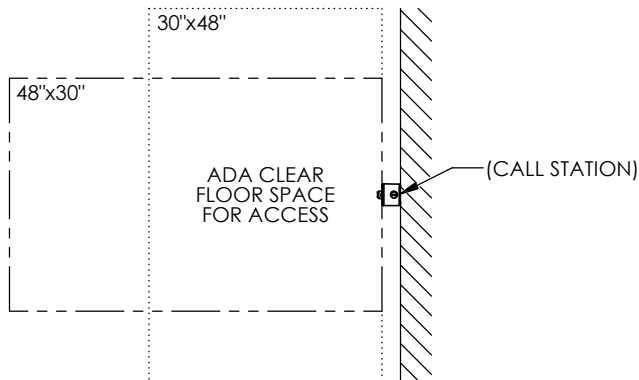


SURFACE MOUNT



FLUSH MOUNT

(PLATE COMPATIBLE WITH PREINSTALLED 1-GANG BOX)



INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M-1994		CONTRACT NO.		P.O. BOX 40020 TUCSON, ARIZONA 85717-0020	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (MM)		DRAWN S. APPLEBY		DATE 12-4-24	
TOLERANCES:		CHECK APPROVED		TITLE OPERATING STATION (CALL BOX) WALL MOUNTED	
DECIMALS .XX ± N/A .XXX ± N/A		ANGLES ± N/A		By CWillis at 10:06 am, Dec 05, 2024	
DO NOT SCALE DRAWING		MANUFACTURING		DWG. NO. 115712	
FINISH		CUSTOMER		REV. E	
SIMILAR TO		ACT. WT.		SCALE 1/1	
CALC. WT.		RELEASE DATE		SHEET 1 OF 1	

4

3

2

1

8

7

6

5

4

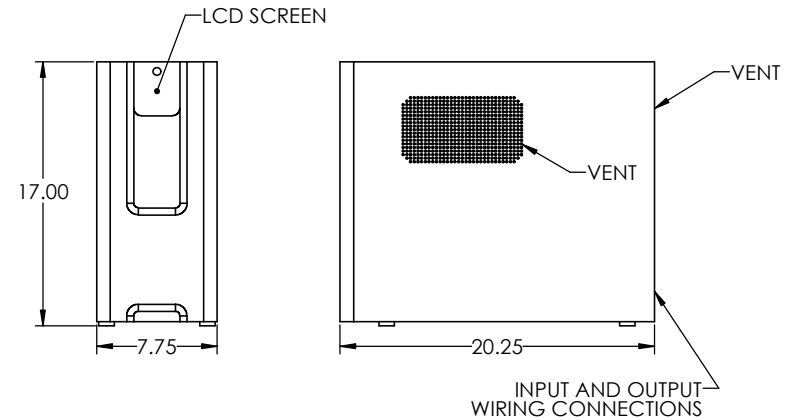
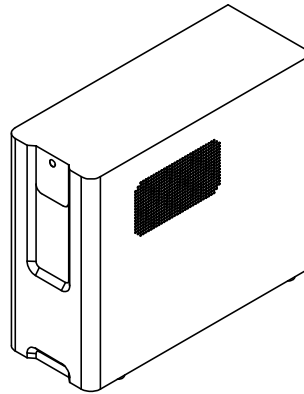
3

2

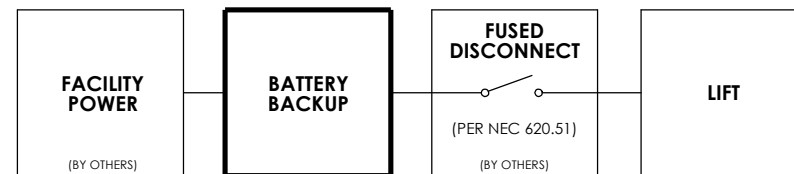
1

NOTES UNLESS OTHERWISE SPECIFIED:

1. DESCRIPTION: BATTERY BACKUP FOR ASCENSION LIFTS.
2. OPERATION:
 - 2.1 FOR USE WITH ASCENSION VIRTUOSO AND PROTÉGÉ MODEL WHEELCHAIR LIFTS.
 - 2.2 PROVIDES STANDBY POWER FOR MINIMUM OF 5 FULL LIFTING CYCLES CARRYING LIFT'S RATED LOAD.
 - 2.3 FOR INDOOR USE ONLY.
3. PHYSICAL CHARACTERISTICS:
 - 3.1 MATERIAL: STEEL ENCLOSURE WITH PLASTIC TRIM
 - 3.2 FINISH: POWDER COATED, BLACK
 - 3.3 WEIGHT: 116 LBS
4. SPECIFICATIONS:
 - 4.1 INPUT: 120VAC, 20A, HARDWIRED (FROM FACILITY)
 - 4.2 OUTPUT: 120VAC, 20A, HARDWIRED (TO LIFT)
 - 4.3 BATTERY: SEALED LEAD ACID
5. MAIN DISCONNECT SWITCH SHALL ELECTRICALLY ISOLATE LIFT FROM BACKUP UNIT. SEE DIAGRAM.
6. BACKUP UNIT MAY BE LOCATED REMOTELY FROM LIFT PROVIDED VOLTAGE SUPPLIED AT LIFT IS 120VAC \pm 6VAC.
EX: MAX ALLOWABLE CIRCUIT (TO LIFT AND BACK) OF 125 FT OF 12 AWG COPPER WIRE.
7. INSTALLATION SHALL ALLOW BACKUP UNIT'S INTERNAL FAN TO DISSIPATE HEAT GENERATED BY UNIT. ASCENSION RECOMMENDS NO LESS THAN 20 SQ. IN. OPEN VENT AREA FOR INSTALLATIONS IN CONFINED SPACES. UNIT MAY BE INSTALLED ON ITS SIDE (WITH SIDE VENT FACING UP).
8. TO PREVENT PREMATURE FAILURE OF INTERNAL BATTERIES, BACKUP UNIT MUST BE SET UP TO CHARGE BATTERIES WITHIN THREE (3) WEEKS OF RECEIPT OF THE UNIT.



WIRING DIAGRAM WITH BATTERY BACKUP



INTERPRET DIMENSIONS AND TOLERANCES (ASME Y14.5M-1994) UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES (MM) TOLERANCES: DECIMALS .001 - .250 FRACTIONS 1/32 - 1/2 ANGLES .1°		DESIGNED BY S. APPLEBY	DATE 12-9-25	TUCSON, ARIZONA 85717-0000 ascension®	
DO NOT SCALE DRAWING.		CHECKED BY By CWillis at 4:12 pm, Dec 12, 2025		ASCENSION BATTERY BACKUP WITH HARDWIRE KIT	
SCALE 1/4"		FSCM NO. 08992		DWG. NO. 116101	
SHEET 1 OF 1		REV C			

4

3

2

1

NOTES UNLESS OTHERWISE SPECIFIED:

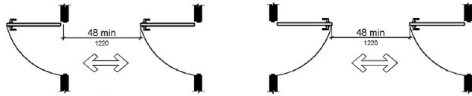
1. THIS DOCUMENT IS INTENDED TO ASSIST IN SITE PLANNING TO ENSURE REQUIRED CLEARANCES FOR LIFT AND REQUIRED ADA ENTRY CLEARANCES ARE PROVIDED.

2. ALL CLEARANCES SHOWN ARE THE **MINIMUM** CLEARANCES REQUIRED. OVERALL DIMENSIONS PROVIDED FOR MOST COMMONLY USED CONFIGURATION.

NOTE: FOR NON-DIMENSIONED CLEARANCES, THE DIFFERENCE IS PROVIDED IN PARENTHESIS. EX: (+6), (-18), ETC.

3. ONLY ONE OF THE THREE ADA-REQUIRED ENTRY CLEARANCES SHOWN AT EACH LANDING MUST BE PROVIDED. MIRROR ENTRY CLEARANCE FOR OPPOSITE DOOR SWING. ENTRY CLEARANCE ALLOWED TO BE OFFSET UP TO 8" MAXIMUM FROM THE FACE OF THE DOOR (FOR WHEN DOOR IS RECESSED).

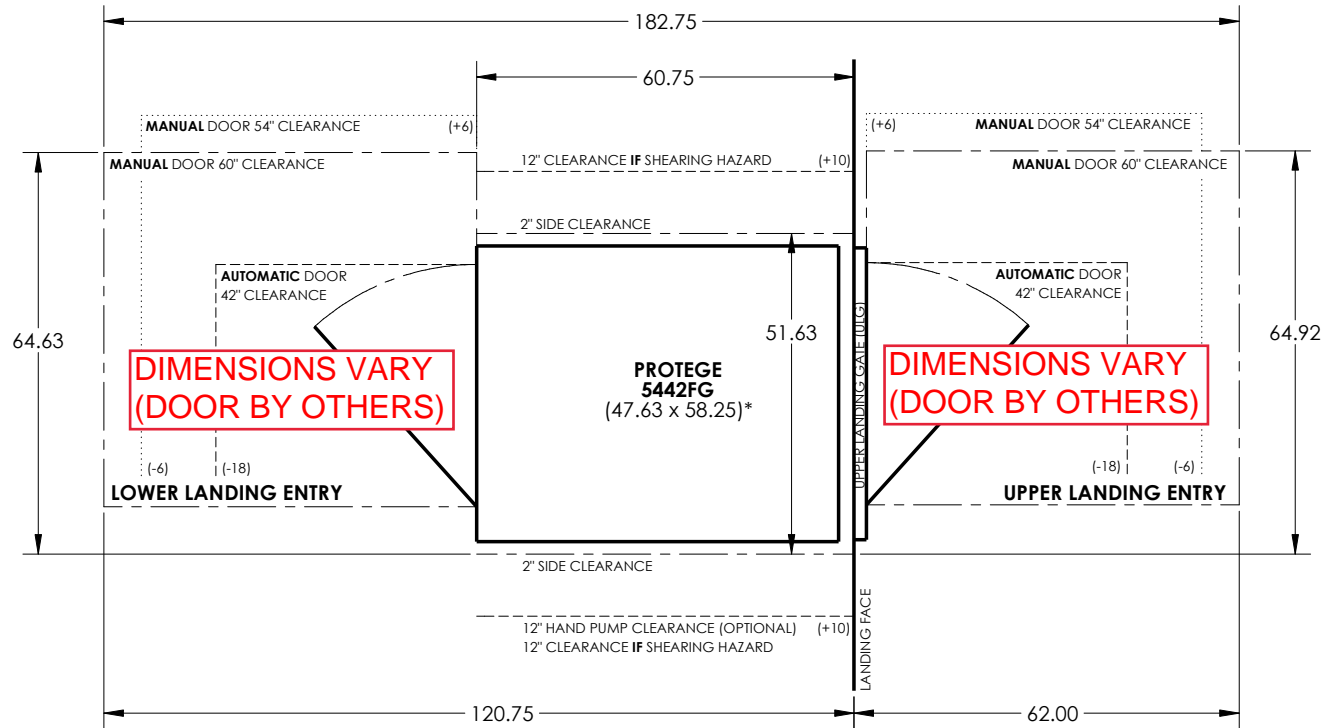
NOTE: ADDITIONAL CLEARANCE REQUIRED FOR DOORS IN SERIES; CLEARANCE OF 48" REQUIRED BETWEEN OPEN DOORS (SO EACH DOOR MAY BE NAVIGATED INDIVIDUALLY).



4. THE ONLY OBJECTS ALLOWED WITHIN 12" OF THE PLATFORM ARE SMOOTH, UNPERFORATED VERTICAL SURFACES WHICH DO NOT POSE SHEARING/CRUSHING HAZARDS. THIS APPLIES THROUGHOUT ENTIRE REQUIRED VERTICAL CLEARANCE (SEE NEXT NOTE).

5. REQUIRES OVERHEAD CLEARANCE OF 80" ABOVE PLATFORM FLOOR AT UPPER LANDING.

(GENERIC LIFT SHOWN. MIRROR GATE SWINGS AND CORRESPONDING DIMENSIONS AS NECESSARY)



*AUTOMATIC DOOR OPERATORS INCREASE OVERALL LIFT/ULG WIDTH (AND REQUIRED WIDTH CLEARANCE) BY 0.69"

				INTERPRET DIMENSIONS AND TOLERANCES IAW ANSI Y14.5M-1994		CONTRACT NO.		αGM CONTAINER CONTROLS, INC.	
				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN S.APPLEBY		P.O. BOX 40020 - TUCSON, ARIZONA 85717-0020	
				TOLERANCES:		DATE 10-1-24		TITLE	
				DECIMALS .XX ± N/A .XXX ± N/A		CHECK APPROVED		REQUIRED CLEARANCES FOR	
				ANGLES ± N/A		By CWillis at 10:39 am, Oct 01, 2024		PROTEGE 5442FG	
				DO NOT SCALE DRAWING		MANUFACTURING		REV. B	
				FINISH		CUSTOMER		DWG. NO. PROTEGE 5442FG CLEARANCES	
PART DASH NO.		NEXT FINAL		NEXT ASSY.		USED ON		SCALE 1/20	
QTY. REQ'D PER ASSY.		APPLICATION		SIMILAR TO		ACT. WT.		RELEASE DATE	
				CALC. WT.				SHEET 1 OF 1	

4

3

2

1