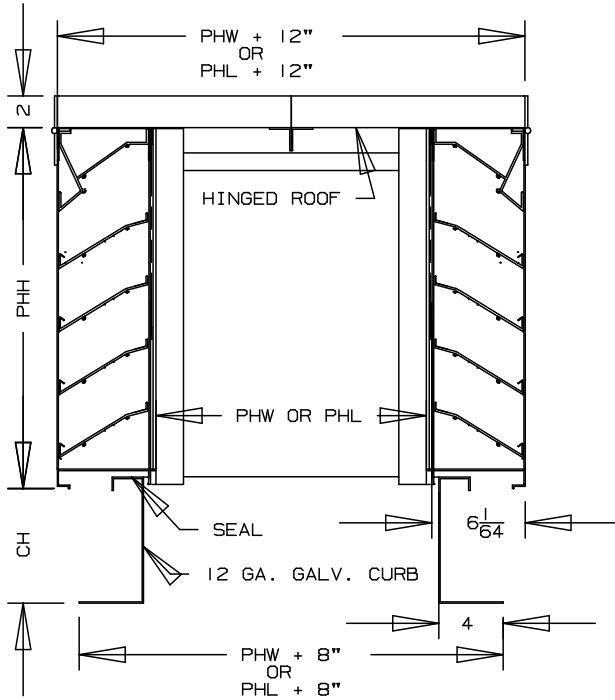


ARROW LOUVERED PENTHOUSE EXTRUDED ALUMINUM 6" DEEP

TYPE PH-64

NOA NO. 06-0822.08

DADE COUNTY APPROVED PENTHOUSE



- PH-64 PENTHOUSE SPECIFICATIONS**
- FRAME: 6" DEEP CHANNEL, .125" THICK 6063-T6 EXTRUDED ALUMINUM ALLOY, BOXED CONSTRUCTION.
 - BLADES: .081" THICK 6063-T5 EXTRUDED ALUMINUM ALLOY.
 - ROOF: ONE (1) PIECE 12 GAUGE ALUMINUM INSULATED HINGED ROOF COMES STANDARD WITH ALL ARROW PENTHOUSE APPLICATIONS.
 - FINISH: MILL.
 - SCREEN: #2" REMOVEABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON INTERIOR.
 - CORNER: .081" THICK FORMED ALUMINUM, FASTEND WITH #8 COVERS STAINLESS STEEL SCREWS ON 12" MAX CENTERS.
 - CURB: 12 GA. GALVANIZED STEEL WITH 2" FLANGE AT TOP AND 4" FLANGE AT BOTTOM. AVAILABLE IN 8" (STD) 12", 18", AND 24" HEIGHTS. SUPPLIED MILL FINISH BY ARROW.

MAX. DESIGN LOAD: ±70 PSF (167MPH)

NDA NO.: 06-0822.08

TESTED IN ACCORDANCE WITH TEST PROTOCOLS TAS-201, TAS-202, AND TAS-203.

- NOTES:**
- MINIMUM STANDARD PENTHOUSE SIZE IS 12"(PHW) X 12"(PHL) X 12" (PHH).
 - MAXIMUM STANDARD PENTHOUSE FACTORY ASSEMBLED SIZE IS 72" (PHW) X 72" (PHL) X 48" (PHH).
 - THE MINIMUM CURB SIZE IS 12" (CW) X 12" (CL) X 8" (CH).
 - THE MAXIMUM CURB SIZE IS 72" (CW) X 72" (CL) X 24" (CH).
 - THE MAXIMUM PENTHOUSE CURB ASSEMBLY IS 72" (PHW) X 72" (PHL) X 72" (PHH+CH).
 - QUALIFIED SUBSTRATES ARE STEEL OR 3000PSI CONCRETE.

PENTHOUSE CAN BE USED FOR INTAKE OR EXHAUST.

VERTICAL SECTION
 PHW = PENTHOUSE WIDTH CH = CURB HEIGHT
 PHL = PENTHOUSE LENGTH CW = CURB WIDTH
 PHH = PENTHOUSE HEIGHT

ITEM NUMBER	QUANTITY	TAG #	PENTHOUSE WIDTH (PHW)	PENTHOUSE LENGTH (PHL)	PENTHOUSE HEIGHT (PHH)	CURB HEIGHT (CH)	OPTIONS			COMMENTS
							INSECT	SPECIAL SCREEN	INSULATED CURB	



ARROW UNITED INDUSTRIES
 A DIVISION OF MESTEK, INC.
 314 RIVERSIDE DRIVE
 WYALUSING, PA 18853
 TEL: (570) 746-1888 FAX: (570) 746-9286
 AGENT: _____

ARCH./ENG. : _____

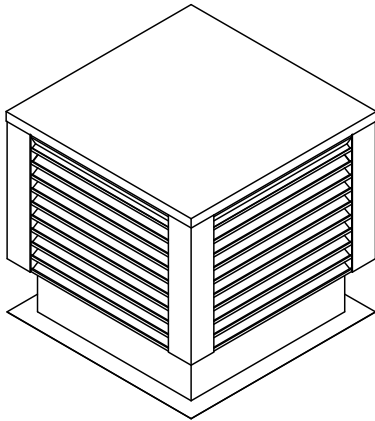
CONTR. : _____

PROJECT: _____

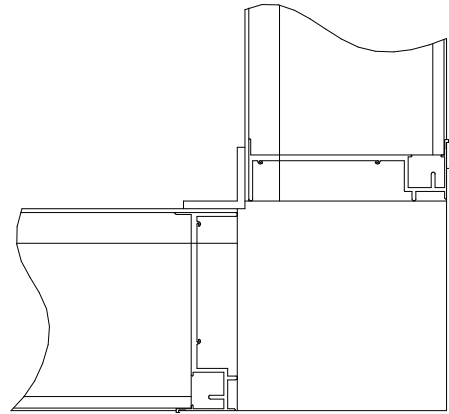
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DATE: _____ DWN. : _____ DWG. : _____

PH-64 PENTHOUSE



PLAN VIEW
BOXED CORNER

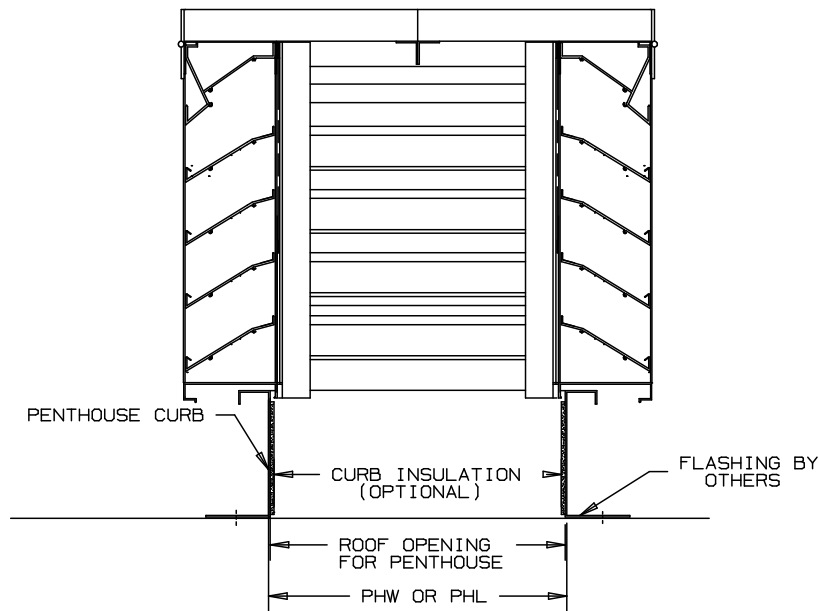


THE ONE PIECE FLAT ROOF STYLE COMES STANDARD FOR ALL ARROW PENTHOUSE APPLICATIONS. THE ROOF IS DESIGNED TO ALLOW FOR THE RUN-OFF OF RAIN.

DADE COUNTY APPROVED PH-64 PENTHOUSE APPLICATIONS

THE PH-64 PENTHOUSE IS DESIGNED FOR AIR INTAKE OR EXHAUST APPLICATIONS ON THE ROOF OF A BUILDING. TYPICALLY, AIR INTAKE APPLICATIONS ARE LIMITED TO 300 TO 500 FPM THROUGH THE PENTHOUSE THROAT AREA. EXHAUST APPLICATIONS MAY GO AS HIGH AS 500 TO 800 FPM. THESE MAXIMUM PENTHOUSE THROAT AREA VELOCITIES SHOULD ALSO BE THE GUIDELINE FOR THE MAXIMUM FREE AREA VELOCITY THROUGH THE LOUVERED AREA OF THE FOUR SIDED PENTHOUSE. THUS, ONCE THE ROOF OPENING WIDTH AND LENGTH (THROAT AREA DIMENSIONS) HAS BEEN ESTABLISHED THE PENTHOUSE HEIGHT CAN BE DETERMINED. THUS WHEN THE LOUVERED FREE AREA VELOCITY OF THE PENTHOUSE IS EQUAL TO OR LESS THAN THE THROAT AREA VELOCITY, THE HEIGHT HAS BEEN DETERMINED.

WHEN USING THE PH-64 FOR A PENTHOUSE APPLICATION, THE INSIDE WIDTH AND LENGTH DIMENSIONS OF THE HOLE IN THE ROOF MATCH THE WIDTH AND LENGTH DIMENSIONS OF THE PENTHOUSE CURB. THE PENTHOUSE CURB IS THEN FASTENED TO THE ROOF BY ANYONE OF THE NOA APPROVED INSTALLATION METHODS. THESE PENTHOUSES HAVE BEEN DESIGNED AND TESTED TO WITHSTAND THE DADE COUNTY PA-201, PA-202, AND PA-203 TEST PROTOCOLS FOR MISSILE IMPACT AND HAVE A DESIGN LOAD RATING OF + OR - 70 PSF (167MPH).



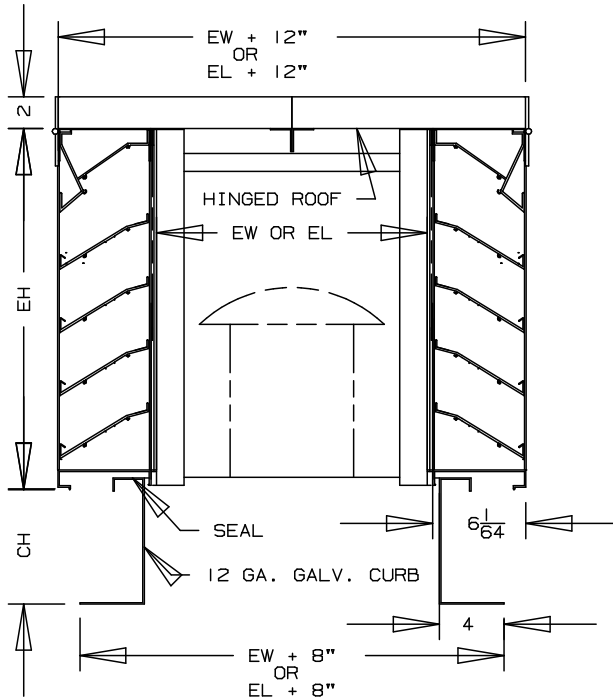
SECTION VIEW

ARROW
LOUVERED PENTHOUSE EXTRUDED ALUMINUM
6" DEEP

TYPE
PH-64

NOA NO. 06-0822.08

DADE COUNTY APPROVED ENCLOSURE



PH-64 ENCLOSURE SPECIFICATIONS

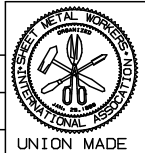
- FRAME: 6" DEEP CHANNEL, .125" THICK 6063-T6 EXTRUDED ALUMINUM ALLOY, BOXED CONSTRUCTION.
- BLADES: .081" THICK 6063-T5 EXTRUDED ALUMINUM ALLOY.
- ROOF: ONE (1) PIECE 12 GAUGE ALUMINUM INSULATED HINGED ROOF COMES STANDARD WITH ALL ARROW ENCLOSURE APPLICATIONS.
- FINISH: MILL.
- SCREEN: #2" REMOVEABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON INTERIOR.
- CORNER: .081" THICK FORMED ALUMINUM, FASTEND WITH #8 COVERS STAINLESS STEEL SCREWS ON 12" MAX CENTERS.
- CURB: 12 GA. GALVANIZED STEEL WITH 2" FLANGE AT TOP AND 4" FLANGE AT BOTTOM. AVAILABLE IN 8" (STD) 12", 18", AND 24" HEIGHTS. SUPPLIED MILL FINISH BY ARROW.
- MAX. DESIGN LOAD: ±70 PSF (167MPH)
- NDA NO.: 06-0822.08
- TESTED IN ACCORDANCE WITH TEST PROTOCOLS TAS-201, TAS-202, AND TAS-203.

NOTES:
MINIMUM STANDARD ENCLOSURE SIZE IS 12"(EW) X 12"(EL) X 12"(EH).
MAXIMUM STANDARD ENCLOSURE FACTORY ASSEMBLED SIZE IS 72" (EW) X 72" (EL) X 48" (EH).
THE MINIMUM CURB SIZE IS 12" (CW) X 12" (CL) X 8" (CH);
THE MAXIMUM CURB SIZE IS 72" (CW) X 72" (CL) X 24" (CH).
THE MAXIMUM ENCLOSURE CURB ASSEMBLY IS 72" (EW) X 72" (EL) X 72" (EH + CH).
QUALIFIED SUBSTRATES ARE STEEL OR 3000PSI CONCRETE.

ENCLOSURE CAN BE USED AS INTAKE OR EXHAUST.

VERTICAL SECTION
EW = ENCLOSURE WIDTH CH = CURB HEIGHT
EL = ENCLOSURE LENGTH CW = CURB WIDTH
EH = ENCLOSURE HEIGHT

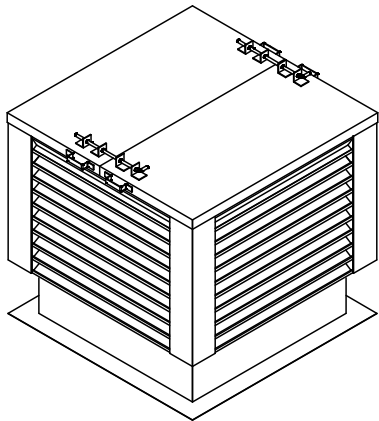
ITEM NUMBER	QUANTITY	TAG #	PENTHOUSE WIDTH (EW)	PENTHOUSE LENGTH (EL)	PENTHOUSE HEIGHT (EH)	CURB HEIGHT (CH)	OPTIONS			COMMENTS
							INSECT	SPECIAL SCREEN	INSULATED CURB	



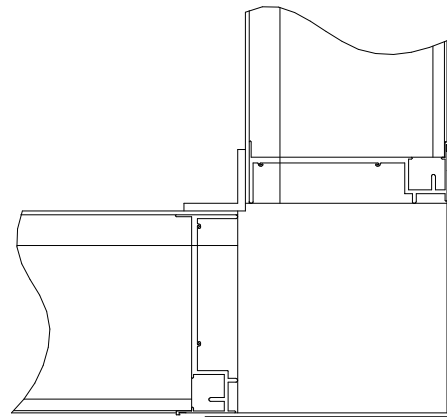
ARROW UNITED INDUSTRIES
A DIVISION OF MESTEK, INC.
314 RIVERSIDE DRIVE
WYALUSING, PA 18853
TEL: (570) 746-1888 FAX: (570) 746-9286
AGENT: _____

ARCH./ENG. : _____
CONTR. : _____
PROJECT : _____
EDR : _____ ECN : _____ JOB : _____
DATE : _____ DWN. : _____ DWG. : _____

PH-64 ENCLOSURE
(SHOWN AS TWO PANEL ROOF)



PLAN VIEW
BOXED CORNER



THE ONE PIECE FLAT ROOF STYLE COMES STANDARD FOR ALL ARROW ENCLOSURE APPLICATIONS. A TWO PANEL ROOF (SHOWN ABOVE) IS OPTIONAL FOR CONVENIENT EQUIPMENT ACCESS

PH-64 ENCLOSURE APPLICATIONS:

THE PH-64 ENCLOSURE APPLICATION IS DESIGNED TO PROTECT EQUIPMENT THAT IS TYPICALLY MOUNTED ON THE ROOF OF A BUILDING SUCH AS FANS, ETC. THIS PROTECTION IS FOR THE FORCE OF WIND DRIVEN DEBRIS (MISSILES) THAT CAN BE HURLED AT HIGH SPEEDS TOWARD CRITICAL EQUIPMENT THAT NEEDS TO OPERATE DURING A HURRICANE. HOSPITALS, NURSING HOMES, AND SCHOOLS WHERE PEOPLE OFTEN GO TO RIDE OUT THE HURRICANES, ARE THE MOST COMMON APPLICATIONS WHERE ENCLOSURES ARE SPECIFIED.

SINCE A PH-64 PROTECTS EQUIPMENT, IT MUST BE ABLE TO COMPLETELY SURROUND THE EQUIPMENT IT IS PROTECTING. THUS A PIECE OF EQUIPMENT THAT IS 48" IN DIAMETER MUST HAVE A MINIMUM INSIDE WIDTH AND LENGTH OF AT LEAST 48". HOWEVER, IT IS RECOMMENDED THAT SOME CLEARANCE (6") BE PROVIDED BETWEEN THE EQUIPMENT AND THE ENCLOSURE. THUS, IN THIS EXAMPLE THE ENCLOSURE WIDTH AND LENGTH SHOULD BE 60" (48"+6"+6"=60"). SIMILARLILY, THE ENCLOSURE HEIGHT SHOULD ALSO COMPLETELY COVER THE EQUIPMENT AND HAVE A 6" CLEARANCE AS WELL.

THUS, WHEN USING THE PH-64 FOR AN ENCLOSURE APPLICATION, THE OUTSIDE WIDTH, LENGTH AND HEIGHT DIMENSIONS OF THE EQUIPMENT PLUS SOME CLEARANCE DETERMINES THE FINAL ENCLOSURE WIDTH, LENGTH AND HEIGHT DIMENSIONS REQUIRED. THE ENCLOSURE CURB IS THEN FASTENED TO THE ROOF BY ANYONE OF THE APPROVED NOA INSTALLATION METHODS. THESE ENCLOSURES HAVE ALSO BEEN DESIGNED AND TESTED TO WITHSTAND THE DADE COUNTY PA-201, PA-202 AND PA-203 TEST PROTOCALS FOR MISSILE IMPACT AND HAVE DESIGN LOAD RATINGS OF + OR - 70 PSF (167MPH).

