

A photograph of a modern bathroom interior featuring a long white vanity with multiple sinks and chrome faucets. The background shows glass partitions and a door with a wheelchair symbol. A large green-to-blue gradient overlay covers the left and center portions of the image.

MECHANICAL CHASE SOLUTION GUIDE

build better™
DIRTT

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This document may contain images that are render representations of DIRT.

OVERVIEW

Features

- **Cost effective:** minimal material and reduced shipping cost
- **Easy accessibility:** permits access to plumbing and electrical spaces
- **Easy installation:** reduced installation time, custom tooling and milling are not required
- **Prefabricated:** Mechanical Chase Weldment is assembled in factory, and shipped to site

DIRTT's Mechanical Chase allows for easy access and on-site installation of plumbing or other building features that are built seamlessly between DIRTT walls. The chase solution for plumbing and electrical projects is applicable to healthcare, educational and commercial spaces, and almost anywhere else.

The chase is compatible with 4" and 6" solid walls that have a standard width between 6"-16" (152mm-406mm) with a minimum height of 5'-0" (1.52m), and a maximum height of 9'-0" (2.74m).

The spanning plates used as part of this solution are designed to the exact width specifications of the chase and can be repositioned during on-site installation to accommodate access to pipes.

MECHANICAL CHASE FOR 4" WALLS

Technical Specifications

COMPONENTS AND MATERIALS

ALUMINUM EXTRUSIONS

Architectural Grade and Structural Aluminum Alloys

Aluminum Finish Options

Clear Anodized (5 micron standard)

Powder Coated

Custom as required, see www.mydirtt.com for standard DIRT T color options

STEEL COMPONENTS

Spanning Plates

12 ga. Satin Coat

Mechanical Chase Weldment

12 ga. Cold-rolled Steel (CRS),

Powder Coated

Chase Insulation Hangers

22 ga. Satin Coat

DIMENSIONS AND DETAILS

MECHANICAL CHASE SOLUTION

Minimum (Min.) Height	5'-0" (1.52m)
Maximum (Max.) Height	9'-0" (2.74m)
Width	6"-16" (152mm-406mm)

MECHANICAL CHASE WELDMENT

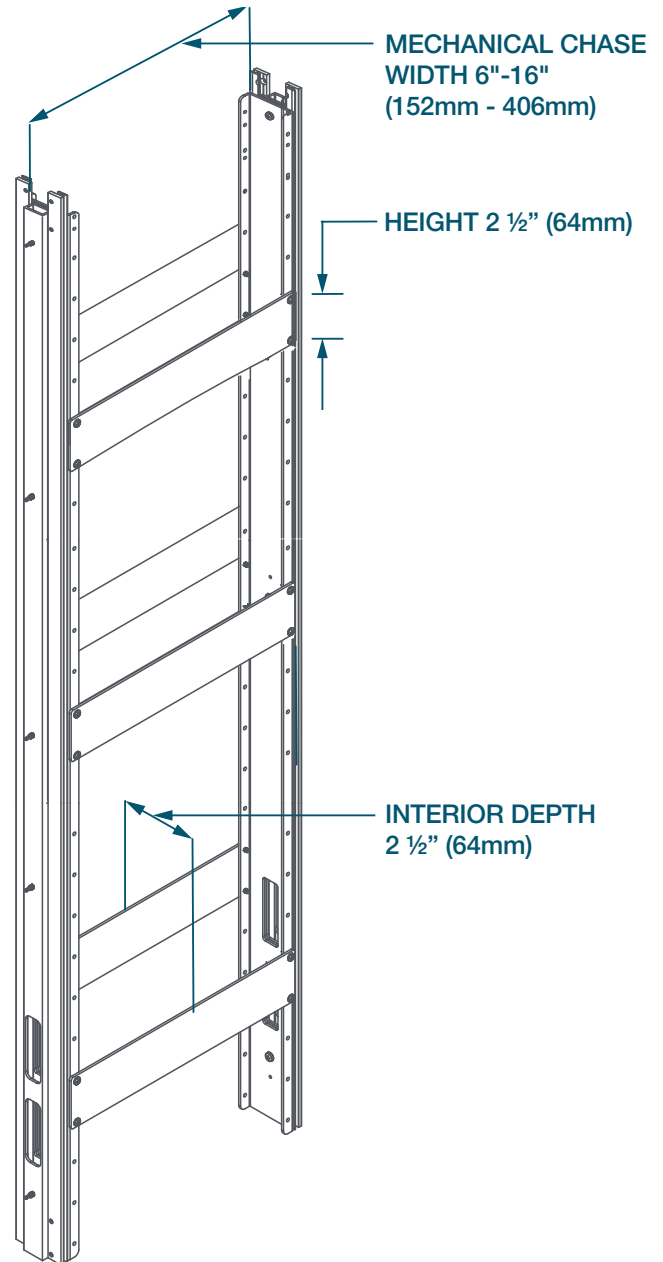
Min. Height	5'-0" (1.52m)
Max. Height	9'-0" (2.74m)

SPANNING PLATES

Height	2 ½" (64mm)
Width	6"-16" (152mm-406mm)
Interior Depth (clear dimension)	2 ½" (64mm)

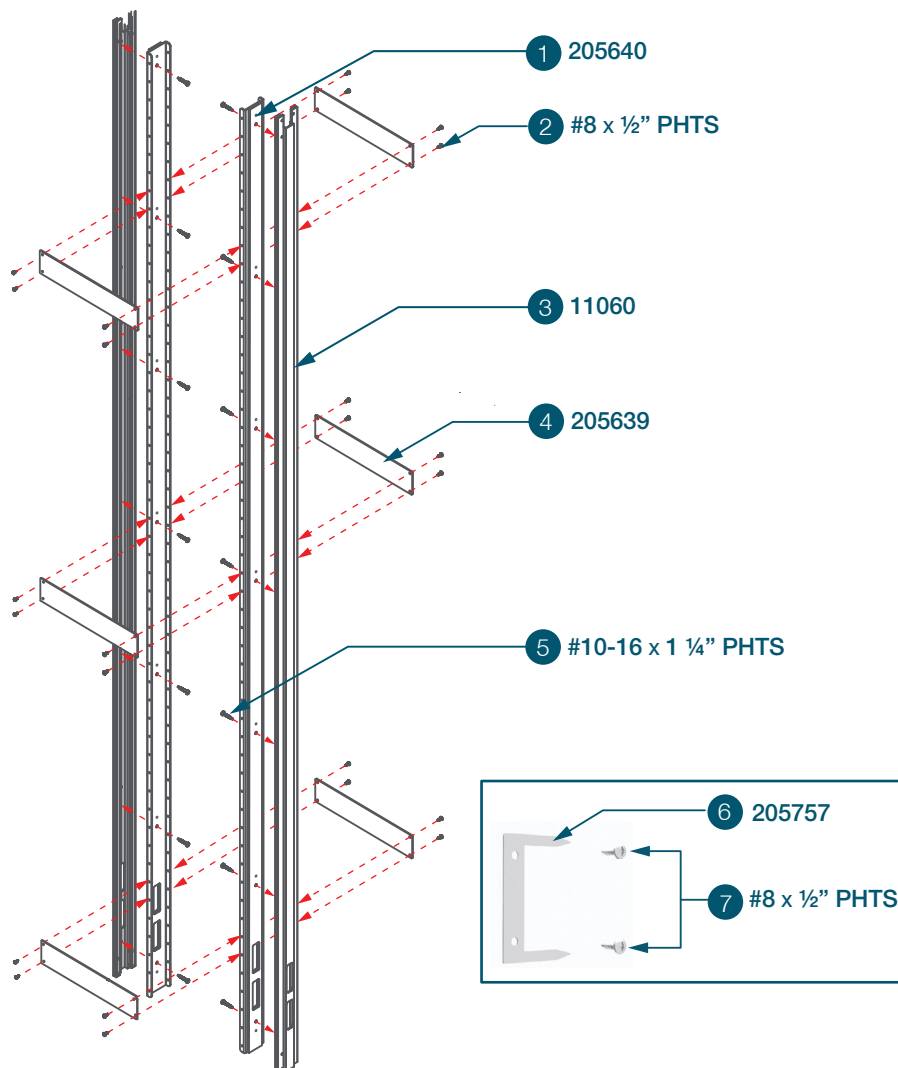
CHASE INSULATION HANGER

Width	3" (76mm)
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PART REFERENCES

PART	PART NAME	QTY	DETAILS
96911	4" Mechanical Chase Assembly		
1 205640	Mechanical Chase Weldment	2	Components assembled in factory and shipped to site.
2 STOCK	#8 x 1/2" Pan Head Tek Screw (PHTS)	24	
3 11060	Fat Angus	2	
4 205639	Mechanical Chase Spanning Plate	6	
5 STOCK	#10-16 x 1 1/4" PHTS	14	
HW768	Mechanical Chase Insulation Clip		
6 205757	Chase Insulation Hanger	8	
7 STOCK	#8 x 1/2" PHTS	16	



MECHANICAL CHASE INSTALLATION

Installing the Mechanical Chase for 4" Walls



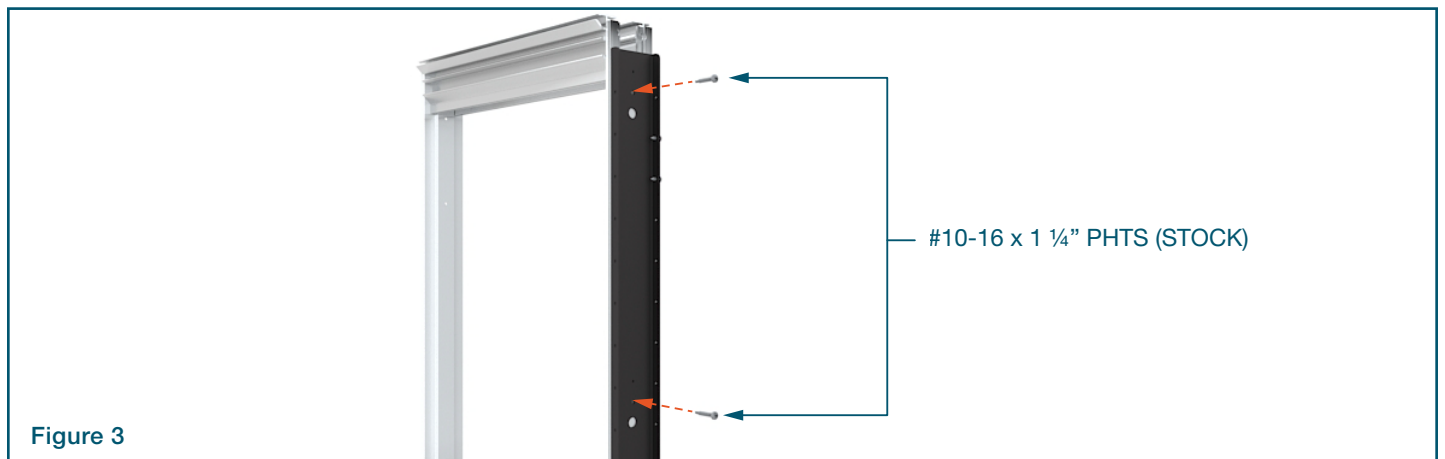
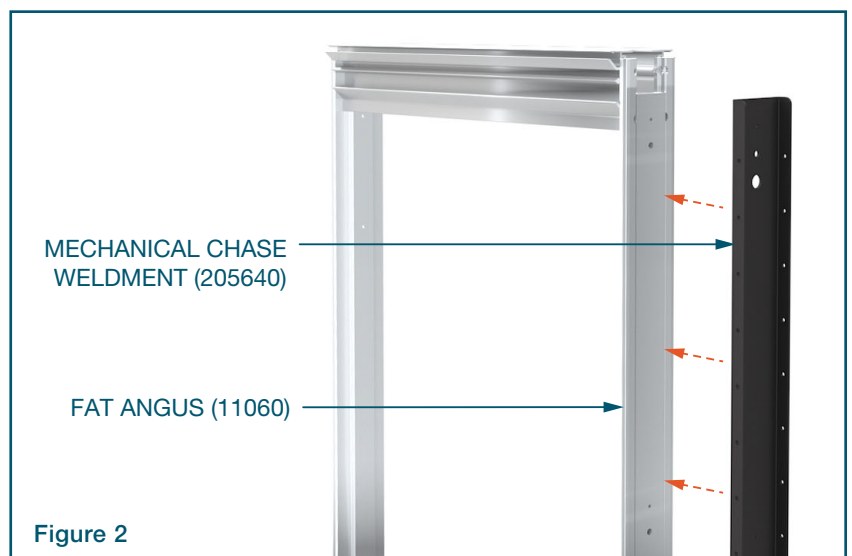
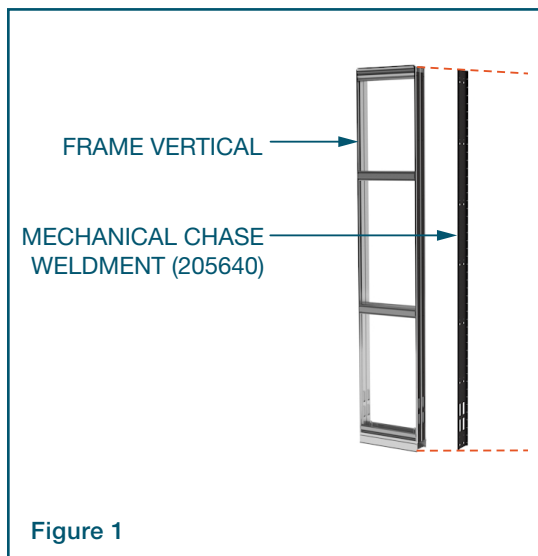
NOTE

The steps to install the 4" Mechanical Chase can vary depending on the circumstances. This is the preferred method used by DIRT technicians.

01

Fasten Mechanical Chase Weldments

- A.** Align the **Mechanical Chase Weldment (205640)** vertical to the adjacent frame vertical using the **Fat Angus (11060)** port (existing to frame) (Figures 1 and 2).
- B.** Fasten the chase vertical to the Fat Angus using the **#10-16 x 1 1/4" PHTS (STOCK)** – QTY 7 (Figure 3).
- C.** Repeat steps **A** and **B** on the opposite side of the frame.



02

Position and Level Frames

- A. **Position** the **frames** in the elevation to achieve the pre-determined **width** of the **chase**, or to allow the spanning plates to be secured to the vertical members of the chase (Figure 4). **Both frames** are **leveled** once they are stood up in the elevation, the leveling is done to **site conditions** (floor slab) to **ensure** that the **frames align**.



NOTE

The width of the chase is customizable to project specific needs per location. The standard maximum is 16" (406mm). Refer to dimensions specified in ICE.

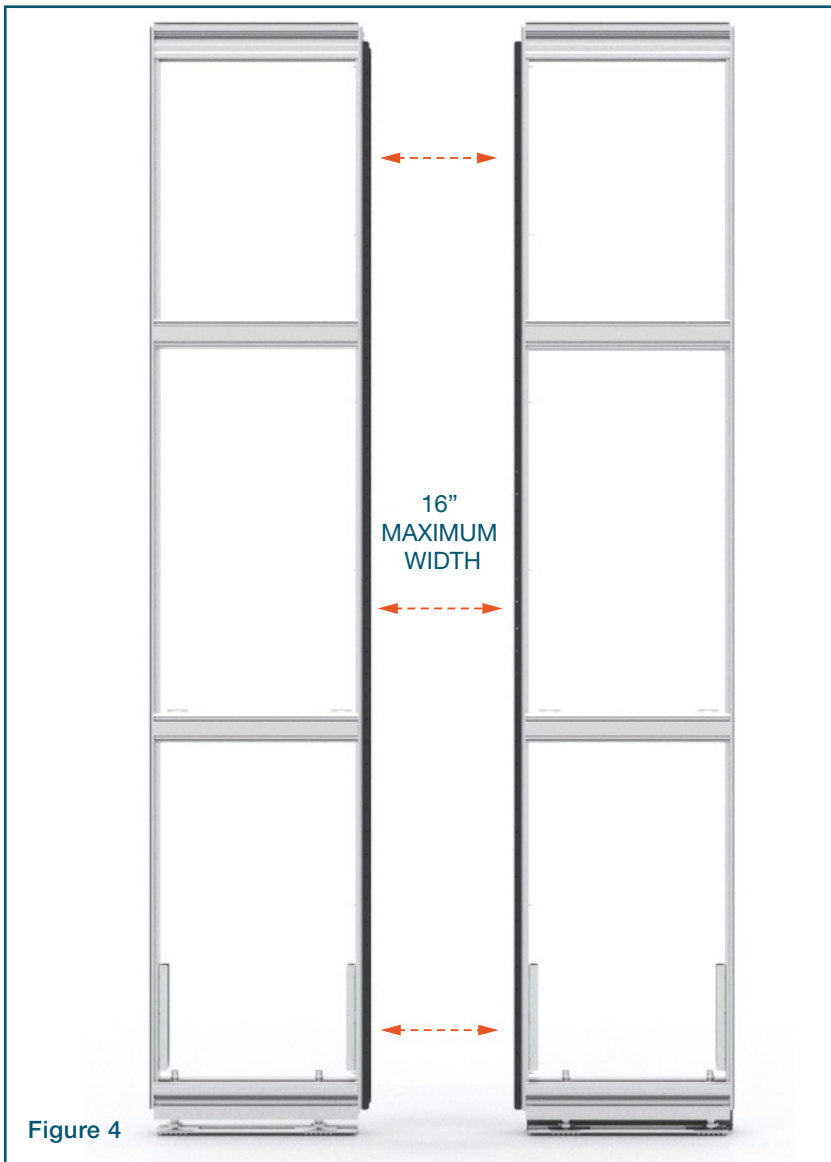


Figure 4

03

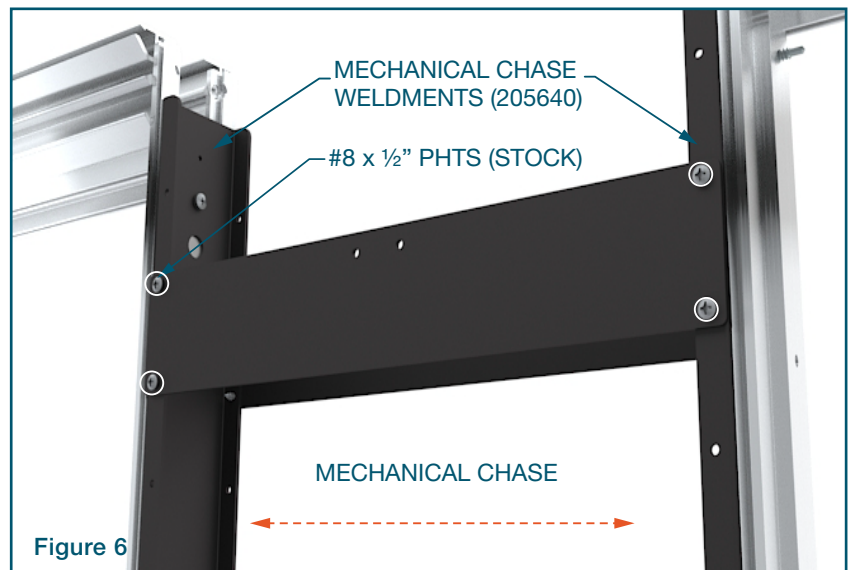
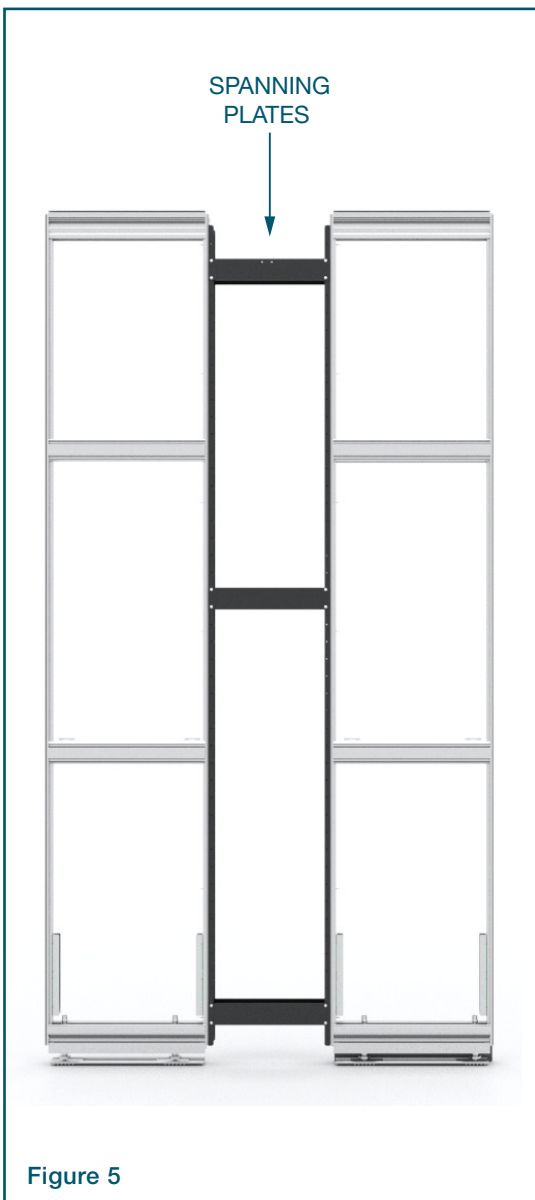
Fasten Spanning Plates

- A. Position the **Spanning Plates (205639)** – QTY 3 minimum per side to the **Mechanical Chase Weldments (205640)** (Figure 5).
- B. Fasten each plate to one side of the **chase weldment** using **#8 x ½" PHTS (STOCK)** – QTY 4 per plate (Figure 6). The plates can be repositioned up or down the chase, if needed.
- C. Repeat steps A and B on the opposite side of the chase (Figure 7).



NOTE

Coordinate locations of spanning plates with horizontal piping. Be sure to allow for space at top of assembly for insulation hangers.



04

Optional: Install Duper

- D.** Install the **duper** to either the back of the panels or the **Fat Angus (11060)** on both sides of the chase (Figure 8).

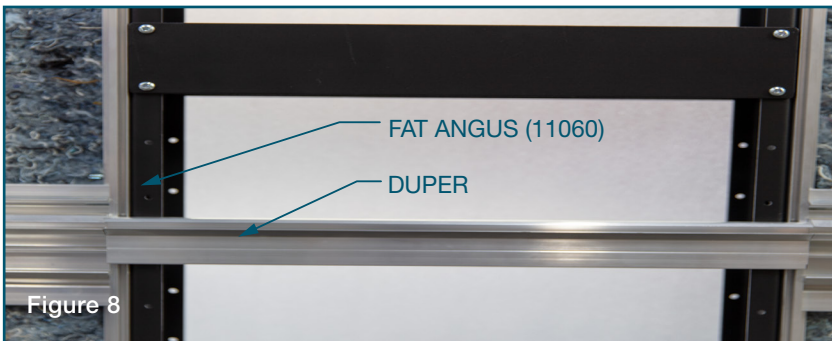


Figure 8



NOTE

Refer to [Duper V2 Release](#) for instructions on how to install dupers.

05

Fasten Insulation Hangers

- A.** Fasten **Chase Insulation Hangers (205757)** – QTY 4 per side to the **Chase Weldment (205640)** using **#8 x 1/2" PHTS** – QTY 2 per hanger (Figure 9).

NOTE: Ensure the prongs point toward the cavity (Figure 10).



Figure 9

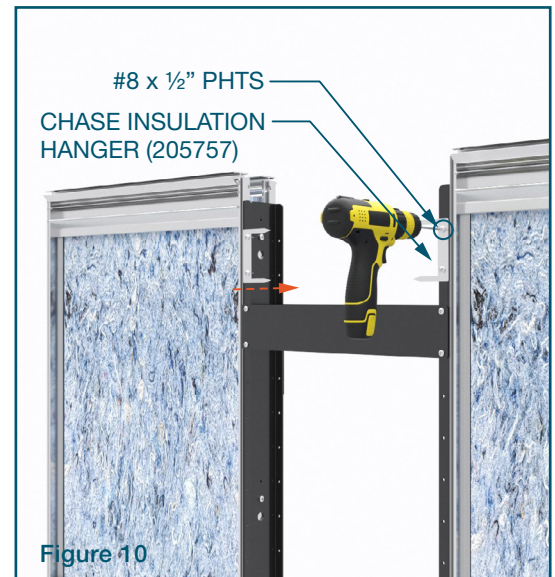
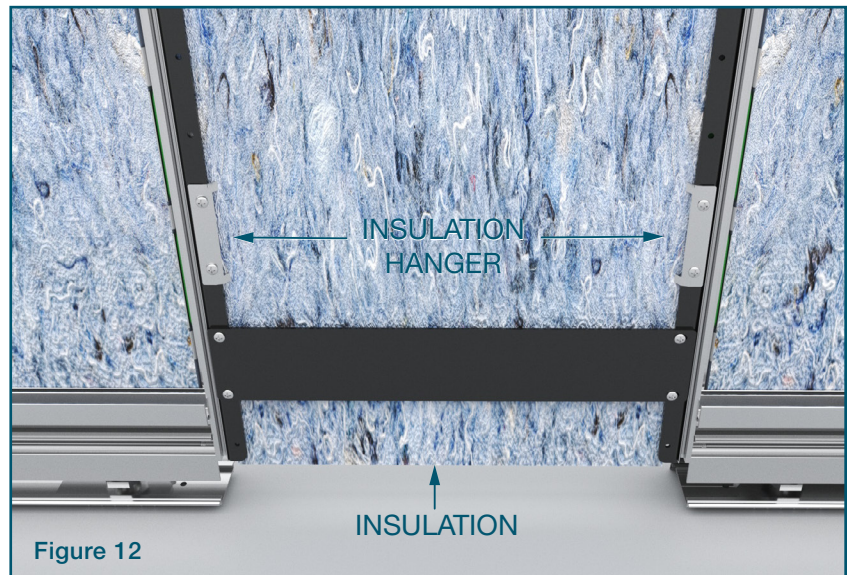
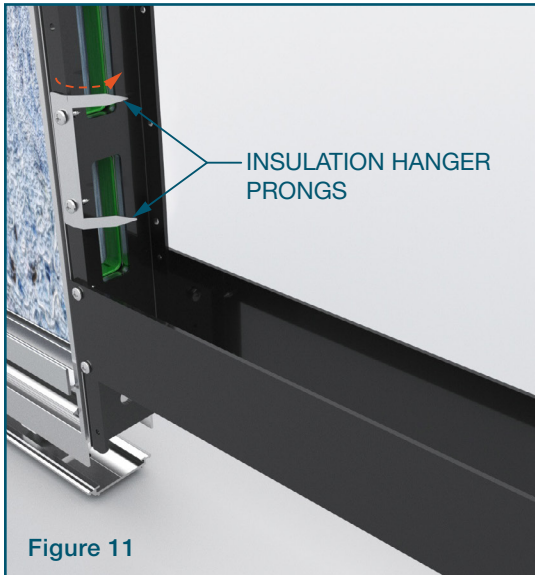


Figure 10

06

Install Insulation

- A. Bend each **prong** of the **Chase Insulation Hangers (205757)** inward to the cavity (Figure 11).
- B. Place a single layer of **pre-cut insulation** into the cavity of the **chase** between the spanning plates.
- C. Attach the **insulation** to the **chase** by **pressing** it into the prongs of **each hanger** on the chase until it is secure (Figure 12).



MECHANICAL CHASE FOR 6" WALLS

Technical Specifications

COMPONENTS AND MATERIALS

ALUMINUM EXTRUSIONS

Architectural Grade and Structural Aluminum Alloys

Aluminum Finish Options

Clear Anodized (5 micron standard)

Powder Coated

Custom as required, see www.mydirtt.com for standard DIRT T color options

STEEL COMPONENTS

Spanning Plates

12 ga. Satin Coat

Mechanical Chase Weldment

12 ga. Cold-rolled Steel (CRS),

Powder Coated

Chase Insulation Hangers

22 ga. Satin Coat

DIMENSIONS AND DETAILS

MECHANICAL CHASE SOLUTION

Minimum (Min.) Height	5'-0" (1.52m)
Maximum (Max.) Height	9'-0" (2.74m)
Width	6"-16" (152mm-406mm)

MECHANICAL CHASE WELDMENT

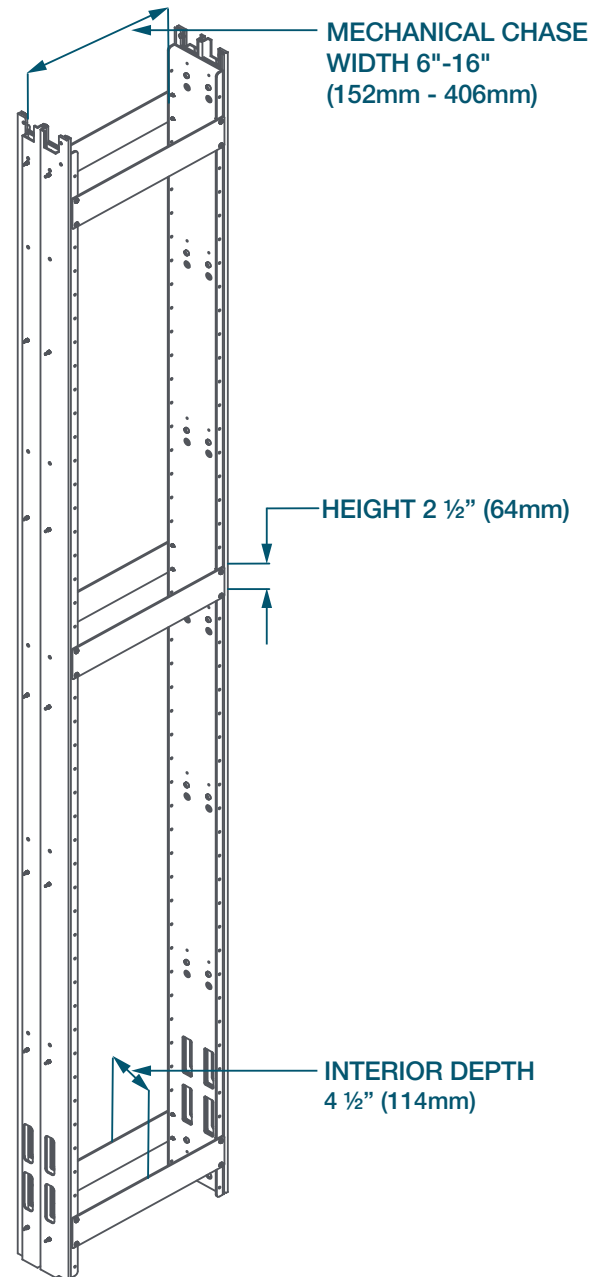
Min. Height	5'-0" (1.52m)
Max. Height	9'-0" (2.74m)

SPANNING PLATES

Height	2 ½" (64mm)
Width	6"-16" (152mm-406mm)
Interior Depth (clear dimension)	4 ½" (114mm)

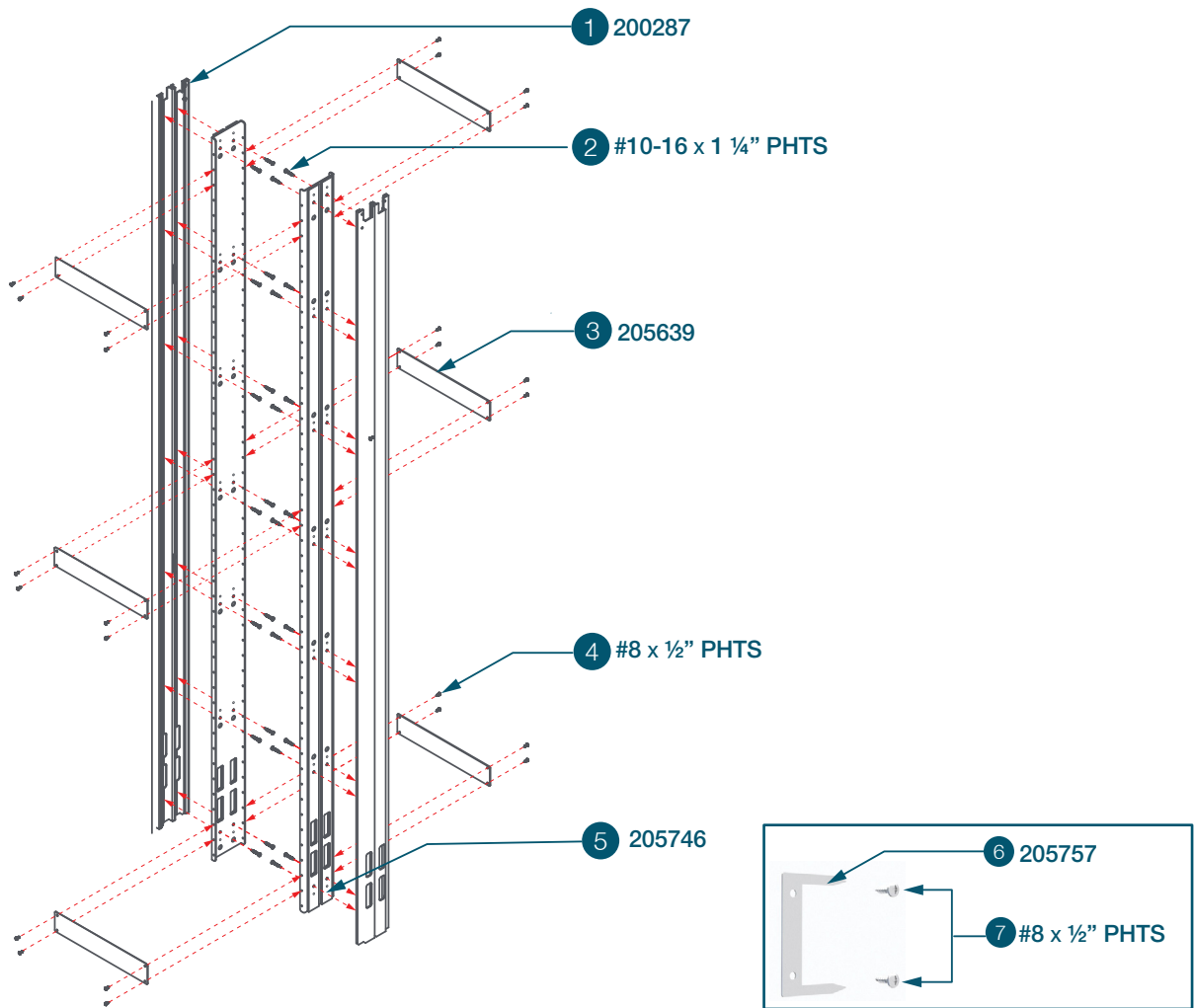
CHASE INSULATION HANGER

Width	3" (76mm)
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PART REFERENCES

PART	PART NAME	QTY	DETAILS
97125	6" Mechanical Chase Assembly		
1 200287	6" Fat Angus	2	
2 STOCK	#10-16 x 1 ¼" PHTS	28	
3 205639	Mechanical Chase Spanning Plate	6	
4 STOCK	#8 x ½" PHTS	24	
5 205746	6" Mechanical Chase Weldment	2	Components assembled in factory and shipped to site.
HW768	Mechanical Chase Insulation Clip		
6 205757	Chase Insulation Hanger	8	
7 STOCK	#8 x ½" PHTS	16	



Installing the Mechanical Chase for 6" Walls



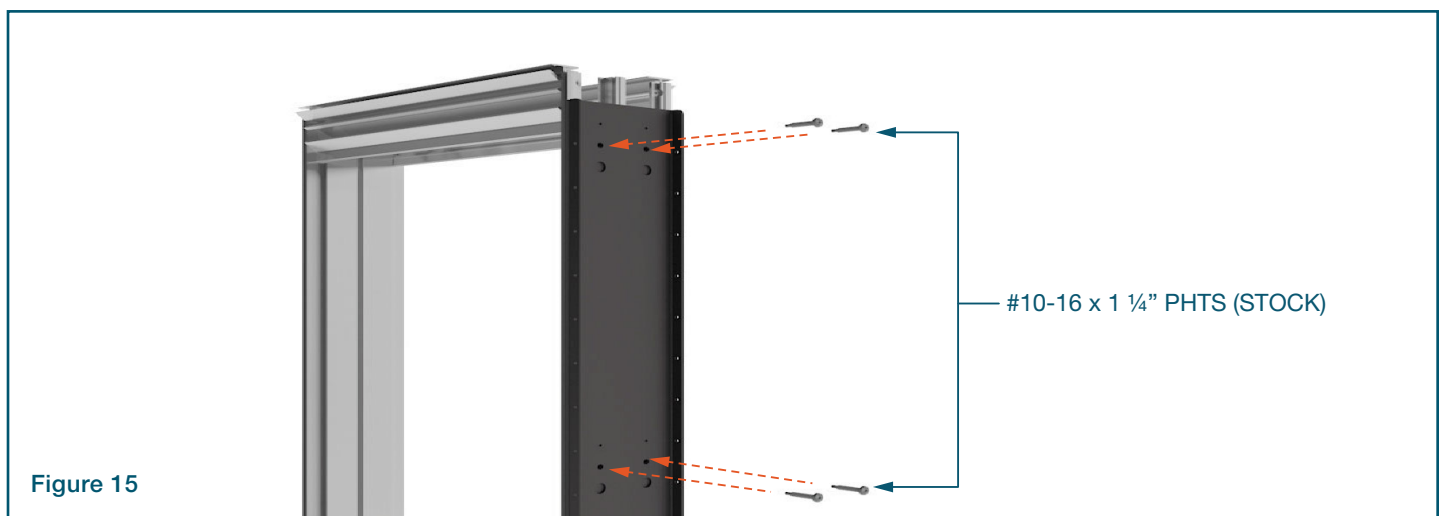
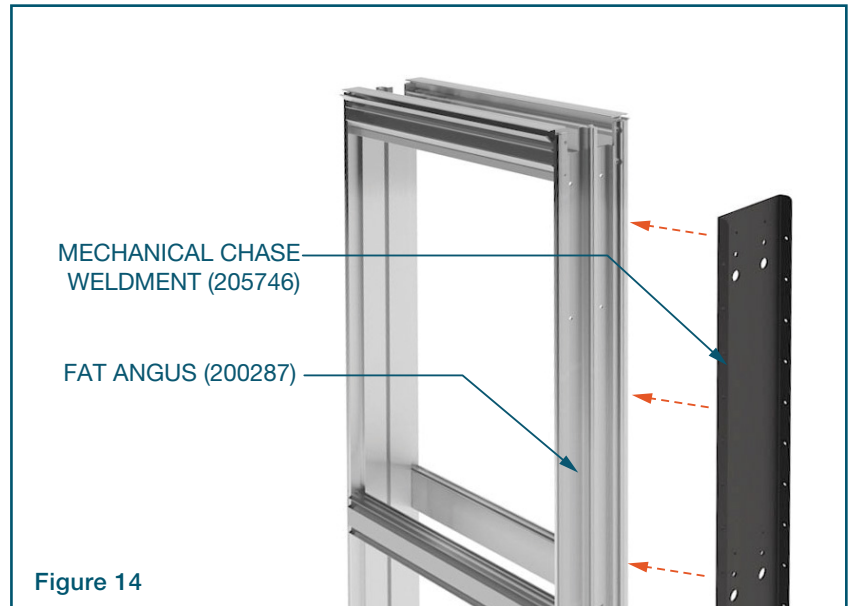
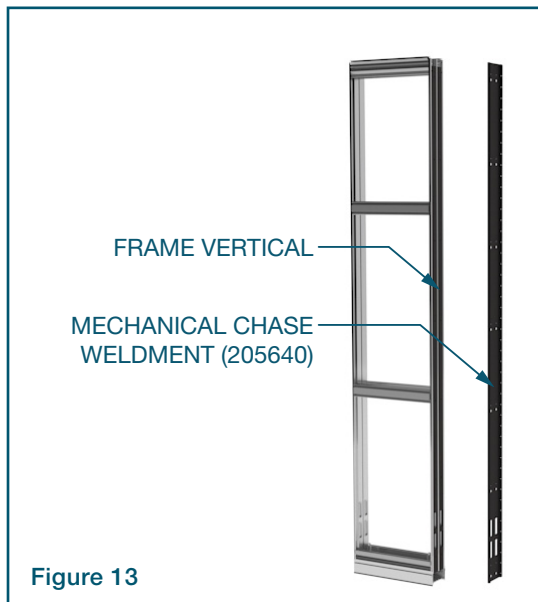
NOTE

The steps to install the 6" Mechanical Chase can vary depending on the circumstances. This is the preferred method used by DIRT technicians.

01

Install Mechanical Chase Weldment

- A. Align the **Mechanical Chase Weldment (205746)** to the adjacent frame vertical using the **Fat Angus (200287)** port (existing to frame) (Figures 13 and 14).
- B. Fasten the chase vertical to the **Fat Angus** using the **#10-16 x 1 1/4" PHTS (STOCK)** – QTY 14 (Figure 15).
- C. Repeat steps A and B on the opposite side of the frame.



02

Position and Level Frames

- A. **Position** the **frames** in the elevation to achieve the pre-determined **width** of the **chase**, or to allow the spanning plates to be secured to the vertical members of the chase (Figure 16). **Both frames** are **leveled** once they are stood up in the elevation, the leveling is done to **site conditions** (floor slab) to **ensure** that the **frames align**.



NOTE

The width of the chase is customizable to project specific needs per location. The standard maximum is 16" (406mm). Refer to dimensions specified in ICE.



Figure 16

03

Fasten Spanning Plates

- A.** Position the **Spanning Plates (205639)** – QTY 3 minimum per side to the **Mechanical Chase Weldments (205746)** (Figure 17).
- B.** Fasten each plate to one side of the **chase weldment** using the **#8 x 1/2" PHTS (STOCK)** – QTY 4 per plate (Figure 18). The plates can be repositioned up or down the chase, if needed.
- C.** Repeat steps **A** and **B** on the opposite side of the chase (Figure 19).



NOTE

Coordinate locations of spanning plates with horizontal piping. Be sure to allow for space at top of assembly for insulation hangers.

SPANNING
PLATES

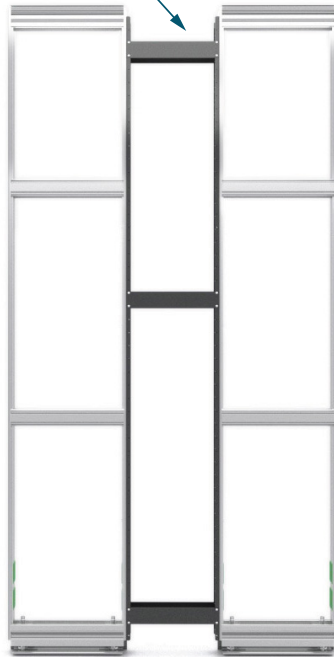


Figure 17

MECHANICAL CHASE
WELDMENTS (205746)
#8 x 1/2" PHTS (STOCK)

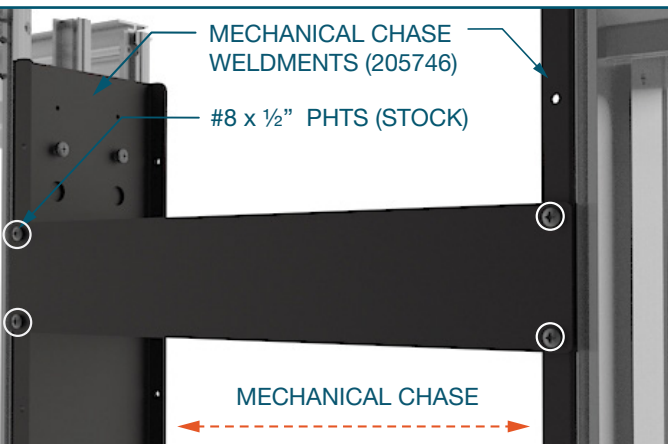


Figure 18

SPANNING PLATES
FRONT AND BACK

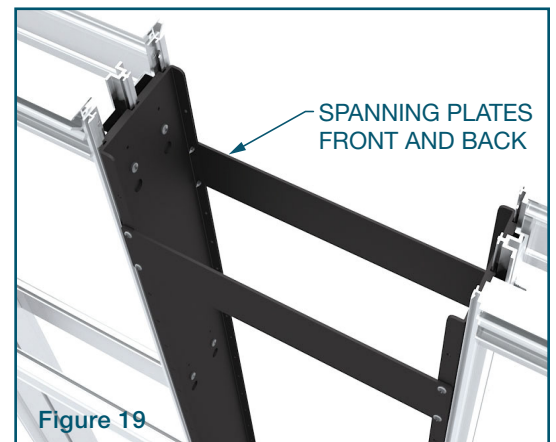
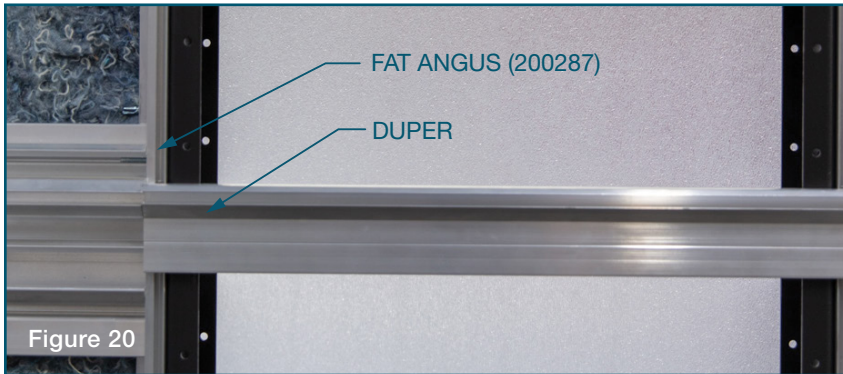


Figure 19

04

Optional: Install Duper

- D. Install the **duper** to either the back of the panels or the **Fat Angus (200287)** on both sides of the chase (Figure 20).



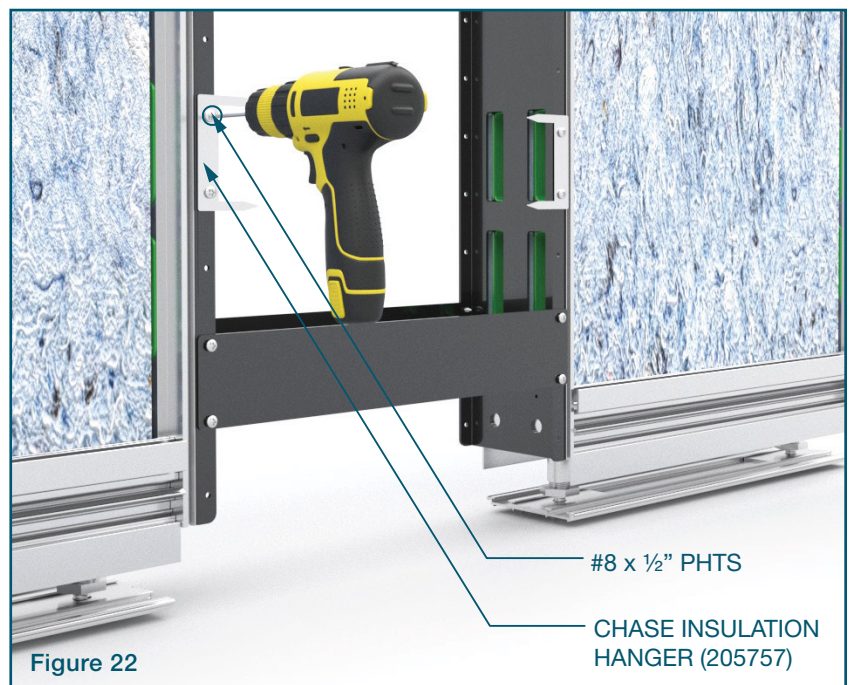
NOTE

Refer to [Duper V2 Release](#) for instructions on how to install duper.

05

Fasten Insulation Hangers

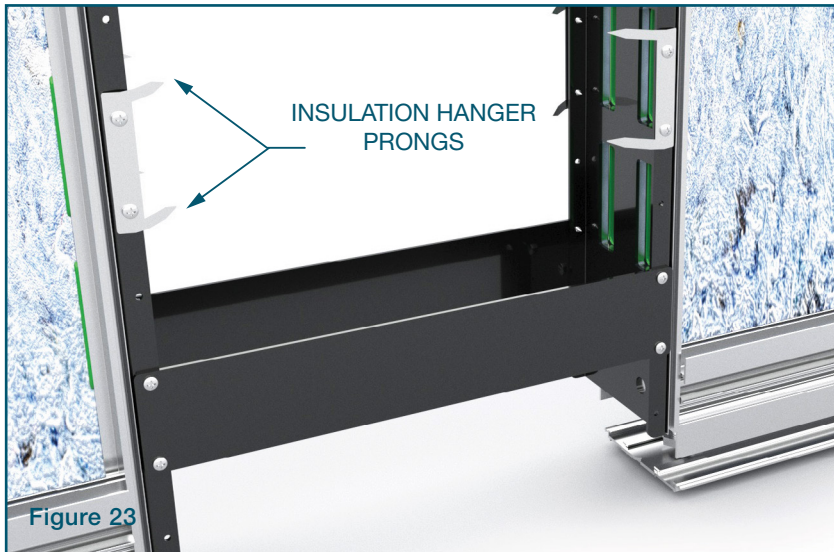
- A. Fasten **Chase Insulation Hangers (205757)** – QTY 4 per side to the **Chase Weldment (25746)** using **#8 x 1/2" PHTS** – QTY 2 per hanger (Figure 21). Ensure the prongs point toward the cavity (Figure 22).



06

Install Insulation

- A. Bend each **prong** of the **Chase Insulation Hangers (205757)** inward to the cavity (Figure 23).
- B. Place a single layer of **pre-cut insulation** into the cavity of the **chase** between the spanning plates.
- C. Attach the **insulation** to the **chase** by **pressing** it into the prongs of **each hanger** on the chase until it is secure (Figure 24).



Revision Reference

DATE	NAME	DESCRIPTION
June 29, 2021	Dolores Dreis	Created new document. Mechanical Chase replaced the Plumbing Chase.
Sept. 9, 2021	Dolores Dreis	Updates, new renderings added