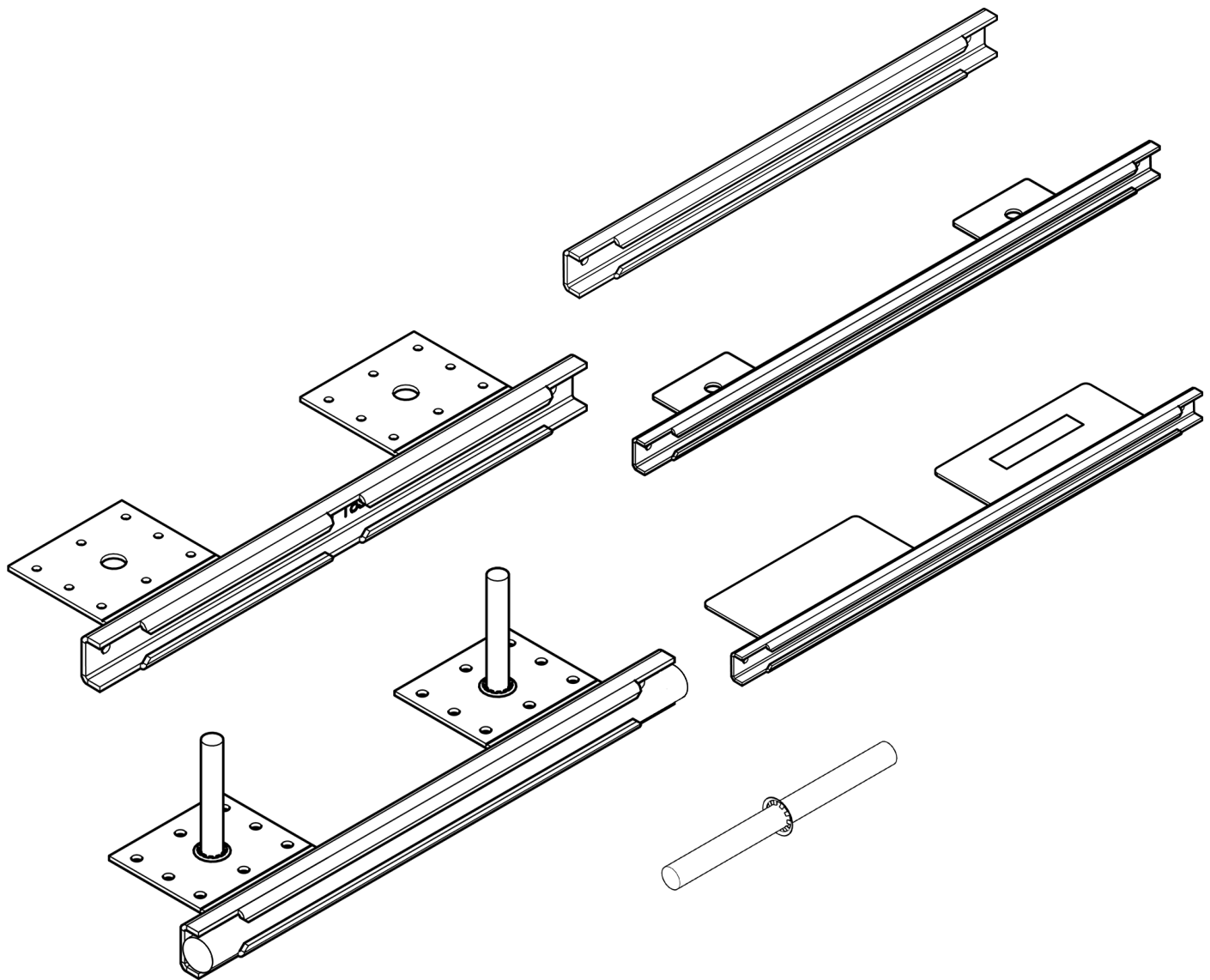


# WALL INSERTS

Part No. 20-202-XX

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## INSTALLATION INSTRUCTIONS



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## PRODUCT INFORMATION & WARRANTY



Scan the QR code for warranty information. For product support, contact Wurtec Customer Service at 1-800-837-1066. If available, the Declaration of Conformity can be downloaded from the product page at [wurtec.com](http://wurtec.com).

This equipment must be installed and serviced by trained personnel. This manual is a guide only and does not replace proper training. Always use appropriate PPE and follow safe work practices. Wurtec reserves the right to change product designs and specifications without notice.

## WARNING

### FAILURE TO COMPLY WITH THE FOLLOWING GUIDELINES COULD RESULT IN DEATH OR SERIOUS INJURY

- **Verify Material Strength:** Ensure the building materials can safely support the working load limits of the inserts
- **Certification Warning:** Do not use these inserts for installations requiring ICC-ES certification.
- **Check Load Limits:** Confirm that the application does not exceed the rated capacities of the inserts. Refer to the specification table for detailed capacity information.
- **Use Rated Anchors:** Always use anchors that meet the specified ratings where required.
- **Minimum Installation Requirements:** Install at least two inserts per rail, ensuring that rails are joined using a tongue-and-groove connection.
- **Proper Usage Only:** Do not use inserts for applications outside of their defined purpose.

## EQUIPMENT DESCRIPTION & INTENDED USE

Wurtec Wall Inserts are engineered specifically for the elevator industry and are compatible with a wide range of wall constructions, including wooden walls with drywall finishes, concrete block or poured concrete walls, and steel-frame buildings. The inserts feature tabs centered within the channel profile, each equipped with 1/2-inch holes for bolts or anchors, multiple smaller holes for nails in wood or drywall, and compatibility with welding to steel structures. Refer to the installation section for details on various mounting options.

The insert design allows the head of a 5/8-inch hex bolt to be placed into the channel through the notches, where it is securely captured. This makes installing rail brackets quick and easy, requiring only a single wrench.

**Important: Wurtec wall inserts are not ICC-ES certified** to any IBC standard and should not be used in applications where ICC-ES certification is required.

## PRODUCT COVERAGE

| Product Type                      | Part Number Series                                                   | Installation Method                                                                         |
|-----------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Standard Wall Inserts             | 20-202-15, 20-202-24, 20-202-30, 20-202-36, 20-202-42                | Poured concrete, concrete blocks, or anchor bolt installation                               |
| Flat Surface Mount Inserts        | 20-202-24H, 20-202-30H                                               | Bolt-through mounting to structural members                                                 |
| Welded Beam Inserts               | 20-202-XX-XW                                                         | Welded to steel beams (4", 5", 6", 8", 10", 12", and 14" beam configurations as applicable) |
| Inserts without Mounting Brackets | 20-202-15P, 20-202-24P, 20-202-30P, 20-202-36P, 20-202-42P           | Weld directly to structural steel                                                           |
| Concrete Installation Kits        | 20-202-15-CK, 20-202-24-CK, 20-202-30-CK, 20-202-36-CK, 20-202-42-CK | Poured concrete installation accessories                                                    |
| Concrete Anchor Kits              | 20-200-20C, 20-200-02, 20-200-07                                     | Anchor hardware for concrete installations                                                  |

## REQUIRED TOOLS

### Anchor Bolts on Poured Concrete

- Standard Inserts
- Drill
- 9/16" drill bit
- Hammer
- 1/2"-diameter Hilti Kwik Bolt 3 Expansion Anchors
- 3/4" Socket Wrench

### Beam Mounted Insert

- Beam Mounted Insert
- Drill Bit (Size 55)
- 1/2" Bolt
- 1/2" Washer
- 1/2" Nut

### Block Concrete Insert

- Concrete Insert Kits

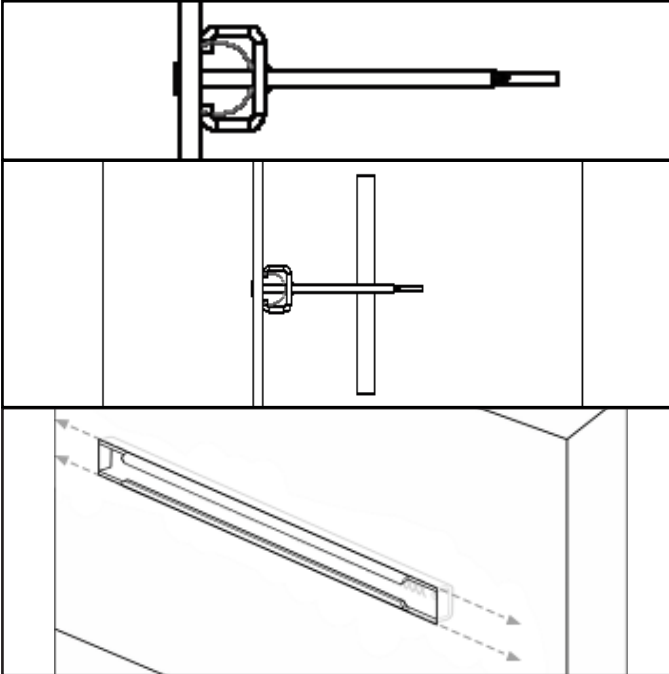
### Wood Structure/Sheetrock Wall

- Standard Insert
- Nails (size 16d)
- Hammer

### Poured Concrete Install

- Concrete Insert Kits
- Nails (size 20d)
- Hammer

## INSTALLATION - POURED CONCRETE



### Step 1: Secure Insert to Concrete Form

- Use holes in channel of insert to secure the insert to the concrete form.
- Driving nails (size 20d) from outside of concrete form will allow for easier removal after concrete has been poured.
- Make sure that foam is in the channel of the insert.

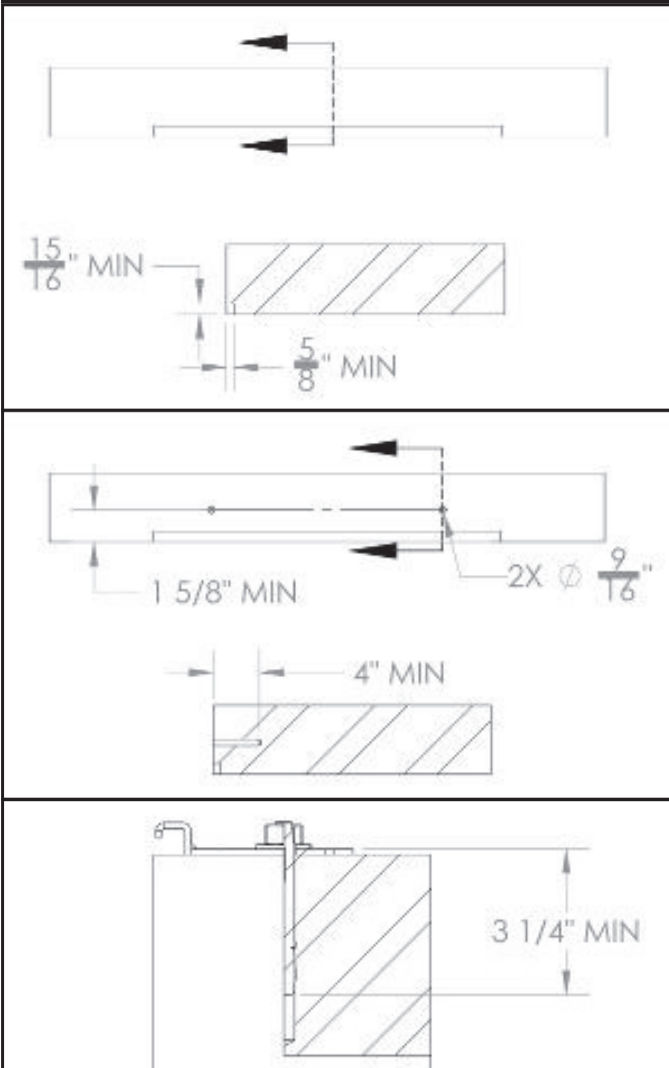
### Step 2: Insert Concrete Anchors Into Inserts

- Insert 1/2" anchor assemblies into 1/2" holes in each insert tabs.

### Step 3: Pour Concrete, Then Remove Foam

- After concrete is cured, ensure that nails and foam are removed from the inserts.

## INSTALLATION - ANCHOR BOLTS ON POURED CONCRETE



### Step 1: Create Relief For Insert

- Remove material from concrete wall to allow space for insert channel
- Notch should be at least 15/16 inches in deep in the wall and 5/8 inches below the face in which anchors will be embedded.
- Insert should sit within notch without overlapping into hoistway.

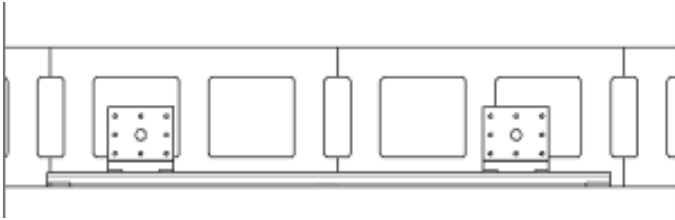
### Step 2: Drill Holes For Anchor Bolts

- Holes should be 9/16" in diameter, at least 4 inches deep and no less than 1-5/8 inches from the wall face.
- Use the insert flush with the notch as a template allow for easy location of anchor holes.
- After holes are drilled, ensure debris is cleared.

### Step 3: Insert Concrete Anchors

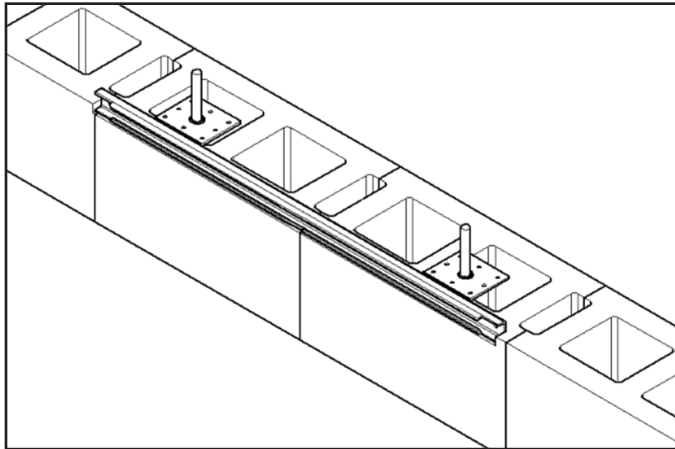
- Insert anchors\* a minimum of 3-1/4" deep in the clean drilled hole by hammer.
- Tighten nuts to 40 ft•lbs (54 Nm).
- \*1/2" diameter Hilti Kwik Bolt 3 expansion anchors should be used.

## INSTALLATION - BLOCK CONCRETE



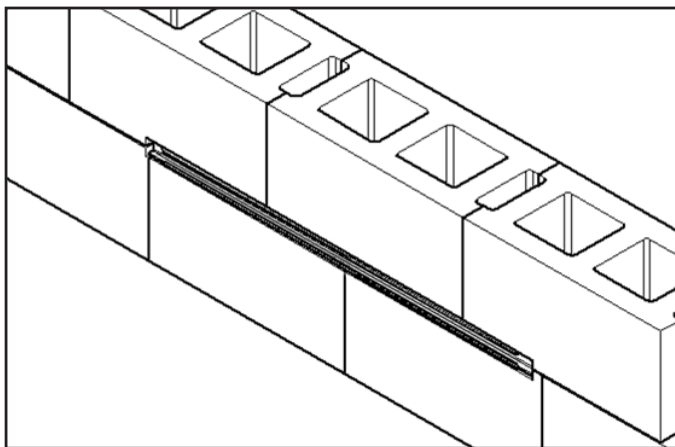
### Step 1: Locate Insert on Concrete Blocks

- Notch blocks for insert channel to allow flush mounting of with wall face
- Fit Insert tabs where the center holes are above the voids within the concrete blocks.



### Step 2: Insert Concrete Anchors Into Inserts

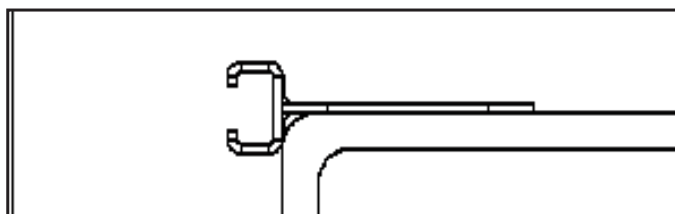
- Insert 1/2" anchor assemblies into 1/2" holes in each insert tabs.



### Step 3: Lay Next Row of Blocks, Then Pour Concrete

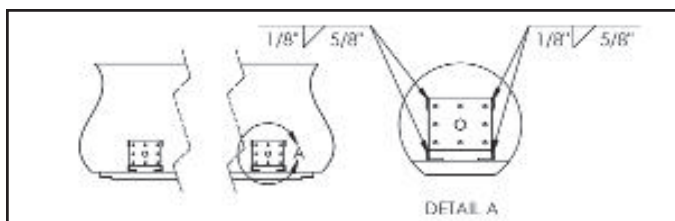
- Continue to add concrete blocks to wall as normal, adding more inserts as needed. Once all blocks are placed, fill blocks with concrete.

## INSTALLATION - WELDED TO BUILDING



### Step 1: Locate Insert

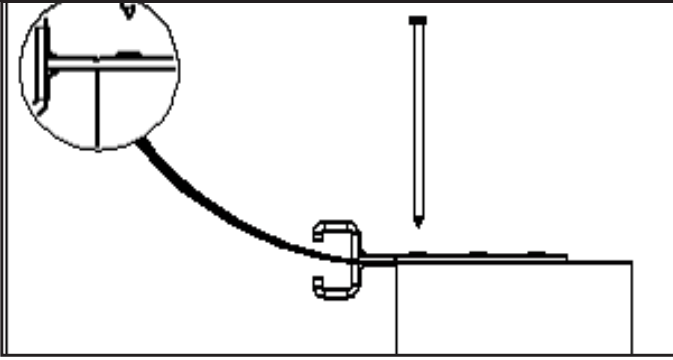
- Locate Insert on I-beam or other structural member.



### Step 2: Weld at Insert Location

- Weld insert tabs to structural member with (4) 1/8" X 5/8" long welds on each plate.
- Welds must be perpendicular to channel.
- Insert tab material is ASTM A1011, Gr. 36.

## INSTALLATION - WOOD STRUCTURE/SHEETROCK WALL



### Step 1: Locate Insert

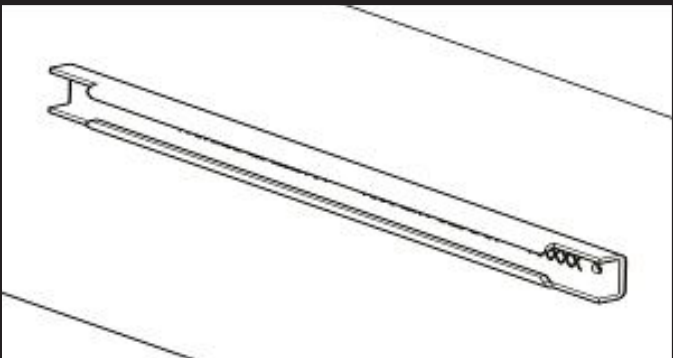
- Locate Insert on wood structure by aligning the etch line in the top of the insert tab with the edge of the wood structure. (etch line based on 5/8" sheet rock thickness)
- Drive (8) 16d nails through the small mounting holes in each insert tab. Size 9 round head wood screws could also be used.



### Step 2: Weld at Insert Location

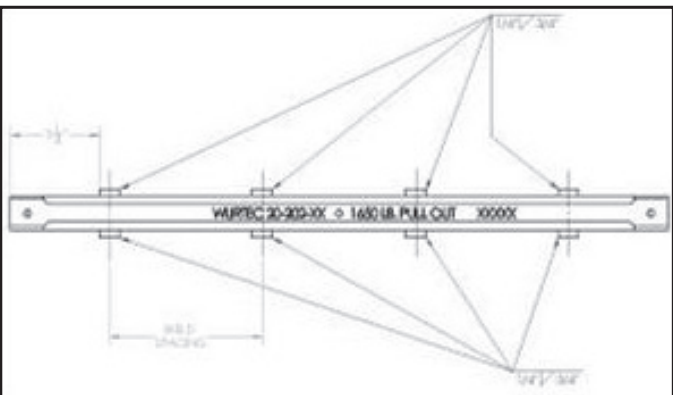
- When installing sheet rock wall, ensure that a notch has been made for the insert channel in the sheets.
- The first sheet should sit between the insert channel and the wood structure and the second sheet should mount in line with the insert channel.

## INSTALLATION - WELD DETAIL FOR 20-20X-XXP



### Step 1: Locate Insert

- Locate Insert on beam, completely flush with mounting surface.
- Ensure surface is clear of interference with weld locations.

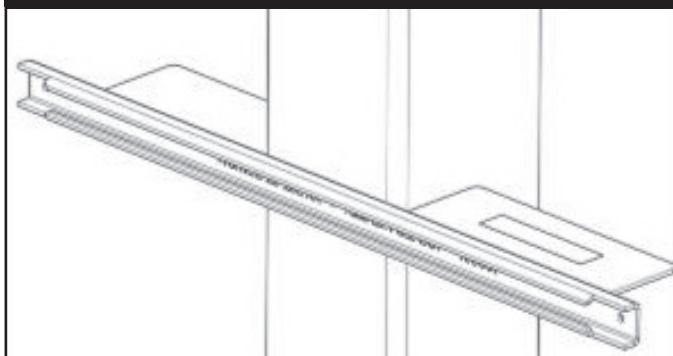


### Step 2: Weld Insert to Beam

- Place at least (4) 1/4" x 3/4" long fillet welds on the bottom and top of the insert.
- Welds should be placed 3 1/4" from the ends of the insert with the other two equally spaced.
- See table below for weld spacing reference.
- Insert material is ASTM A1011, Gr. 50.

| Insert Size | Weld Spacing (in) |
|-------------|-------------------|
| 20-202-15P  | 2.58              |
| 20-202-24P  | 5.58              |
| 20-202-30P  | 7.58              |
| 20-202-36P  | 9.58              |
| 20-202-42P  | 11.58             |

## INSTALLATION - WELD DETAIL FOR 20-20X-XX-XW

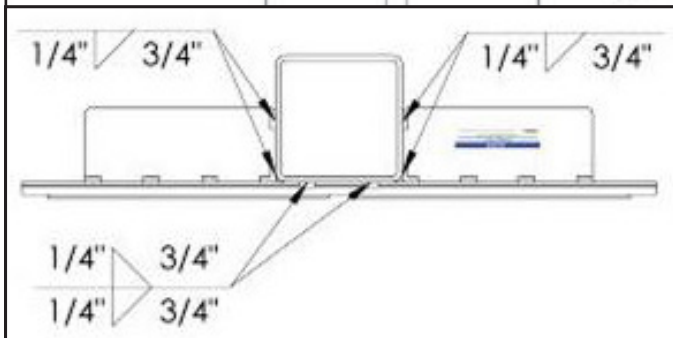


### Step 1: Locate Insert

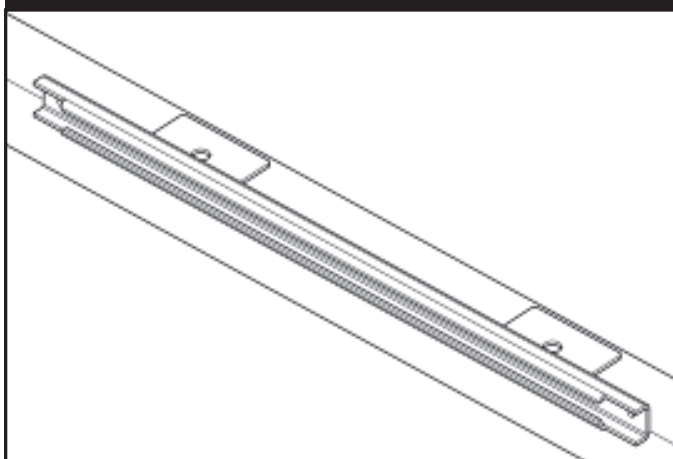
- Locate Insert on beam, completely flush with mounting surface of beam
- Ensure surface is clear of interference with weld locations.

### Step 2: Weld Insert to Beam

- Place at least (2) 1/4" x 3/4" long fillet welds on the top of each weld tab where it meets the beam.
- Place at least (2) 1/4" x 3/4" long fillet welds on the bottom and top of insert channel where it meets the beam.
- Weld tab material is ASTM A1011, Gr. 36. Insert channel material is ASTM A1011, Gr. 50.



## INSTALLATION - WELD DETAIL FOR 20-20X-XXH

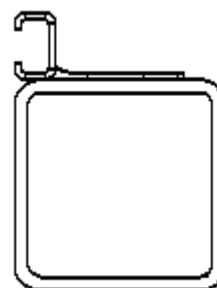
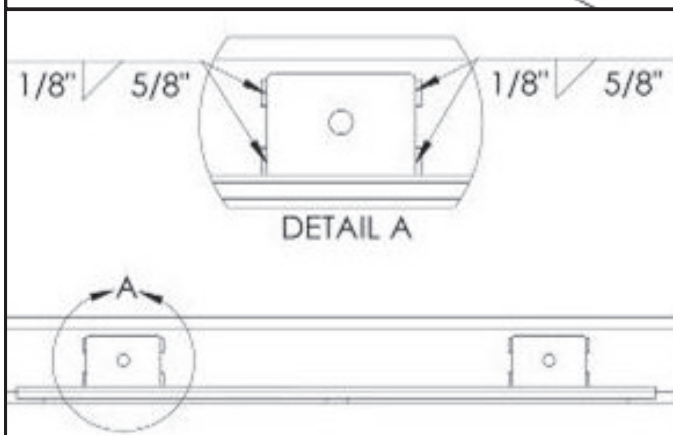


### Step 1: Locate Insert

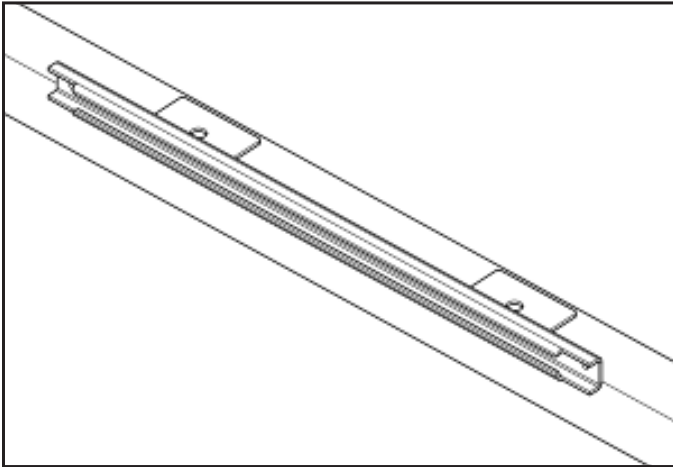
- Locate Insert on beam, completely flush with mounting surface of beam
- Ensure surface is clear of interference with weld locations.

### Step 2: Weld Insert to Beam

- Place at least (4) 1/8" x 5/8" long fillet welds on side of each insert tab where it meets the beam.
- Insert tab material is ASTM A1011, Gr. 36.

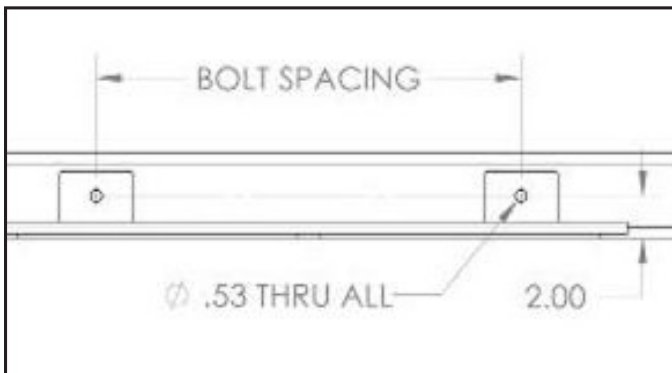


# INSTALLATION - BOLT THROUGH FOR 20-20X-XXH



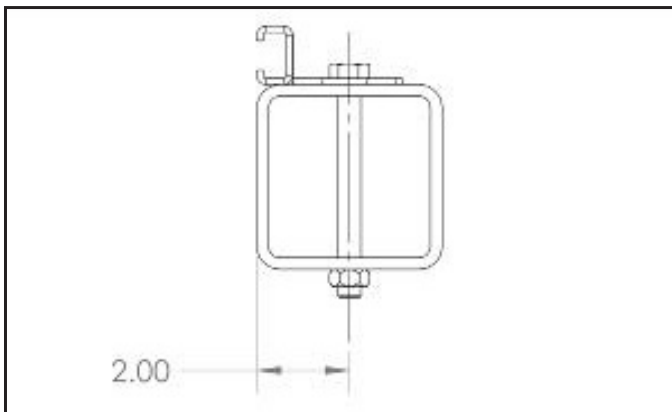
## Step 1: Locate Insert

- Locate Insert on beam, completely flush with mounting surface of beam.



## Step 2: Drill Mounting Holes

- Drill (2) 1/2" clearance holes through beam using insert tabs as a guide.
- In order for channel to be flush with beam face, holes should be 2" from beam face.



## Step 3: Insert Bolts

- Secure insert to beam with 1/2" hardware.