100 Series Assembly Manual

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Recommended Safety Equipment & Attire: Hard hat, leather gloves, safety glasses, work boots, long sleeve shirt, & pants. *No loose clothing.

Recommended Tools: 4 saw horses, tape measure, hammer, 5/16 magnetic nut driver, hammer, snips, ear plugs, 3/8”, 7/16”, ½”, 9/16" sockets, 3/4" deep well socket & wrench, 4-8" extension, 3/16", 1/4", & 1/2" drill bit, pliers, battery operated drill driver, square, & a pencil.

Legal Disclaimer:
I-Beam Sliding Doors will not be held responsible for any incidents or accidents that occur before, during, or after the assembly of the door. I-Beam Sliding Doors is not responsible for damaged materials or injuries to persons and property throughout unloading or building process. DO NOT operate doors in windy conditions

Warranties:
10 year-115 MPH wind warranty. Warranty only covers damage done when doors are latched in either the closed or open position. Warranty does not cover improper assembly and installation of components.

****Prior to install, leave steel panels & base trim off until door is hung and J- channel (#22) is installed.****

100 Series Assembly Manual. 15 minutes to read saves 2 hours of frustration!

1. Lay out door frames, lay top and bottom C's so 2" long end of C is towards jamb and latch handle is towards center. Lay out top C's so trolley holes are towards the ground.

2. Install B1 brackets; start by fastening #12 screws in verticals and 5/16" bolts and nuts thru C Channel. Screw brackets on first then bolts. (this is a picture of top corner of door)

3. Make sure verticals are "T" top "B" bottom & arrow towards ground during assembly. Make sure inside is flush before tightening bolts. (this is a picture of bottom latch side)

4. This is the jamb side of the door bottom C. This is where roller guide bearing will be fastened to.

5. Install the B2 trolley hanger bracket in line with hole on top C using (4) #10 screws. Insert trolley with B20 adjustment washer & standard 1/2" nut

6. Install Girts; line up with pre-drilled holes on verticals, fasten with (4) #10 self-drill screws. BE CAREFULL NOT TO OVER-DRIVE SCREWS. THEY WILL SNAP. 5/8" holes need to be towards latch side and down for latch rod

7. Install latch mechanism so latch handle is down and Exterior handle mount bracket hole is towards top of door frame (picture is top looking down)

8. This is another view of latch mechanism, install rod by removing cotter pin and slide rod over handle. Install flat washer then reinstall cotter pin with pliers

9. Start metal on latch side, rip off first rib. Steel should be flush with top and 1 1/2" up from bottom. Install Bottom J trim flush with outside vert. No rib should be closer than 4" from edge & there needs to be a flat for exterior handle area

10. Before fastening steel measure outside Corner Of vertical diagonally to outside corner top to bottom to make sure door is square ripped edge of steel overlaps vertical frame

11. Fasten Steel in flats beside each rib on all horizontal frames, do not screw along ripped edge of steel. Install screws on bottom C as high as possible

12. Mark girts on top half of top girts and bottom half of bottom girt so screws aren't seen inside. Chalk lines across frame. Install as many screws as you can reach. DO NOT WALK OR LAY ON DOOR.

13. Drill and cut hole for exterior handle through steel.

14. Install vertical frame cover. Inside & bottom gets notched 4 ¼" x 1" to go around bottom C on jamb end and to accept center guide. Cut flush with top of door, fasten at bottom, top, and at each girt. Install "T" trim on prevailing wind door panel.

16. Fold down ends of hat trim to cap door. Do not screw tabs on ends. Notch around trolleys.

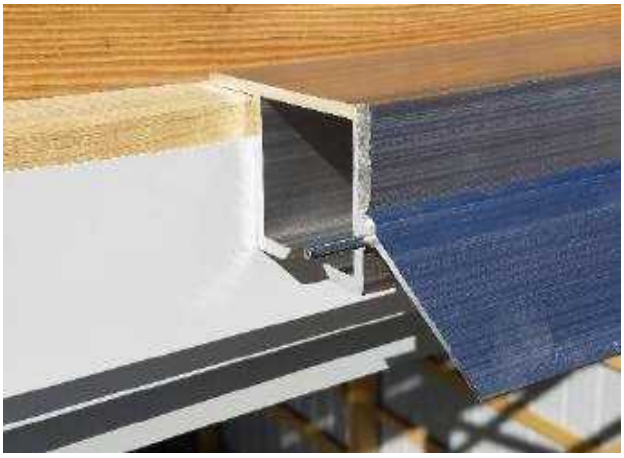
15. Back side top of vertical frame cover needs to be cut at an angle 3" so trim doesn't catch header. Bottom inside of vertical frame cover needs to be notched slightly to fit over B1

17. Fasten hat trim to top of C on back side & through every other rib on face. If trim is spliced, IT MUST BE CAULKED AT SPLICE.

18. Install exterior handle with rubber gasket against steel and plastic filler plate; fasten with 3) 12 x 1.5" screws. Make sure handle is centered and square. Handle can be inserted 4 directions, make sure the "neutral" position is down, between rod up and down.

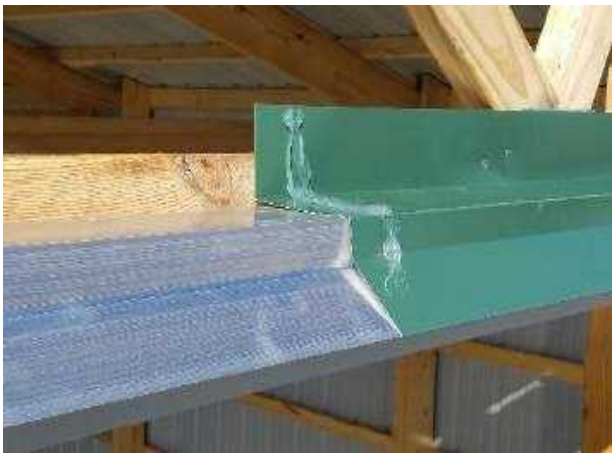
19. Track board. Ideal if 2x6 through opening & 2x4 beyond, door will work with whatever but critical dimension is 1 ½" over framing plane where sheathing is fastened (over header)

20. Install track board trim, covers underside of track. This is not crucial but these are premium doors going on premium buildings. Exposed wood is not premium



21. Install Ultra Glide Track. Face-mount or top mount is relativity the same; face mount uses 2 locking pins vs top mount has 1. Face mount is 1" shorter clearance on door leaf height

21a. Fasten track with lag bolts through pre-drilled holes with 5/16" x 3" lag bolts nail into header.



22. Install track cover; lock over weather guard & nail into header. Very crucial to caulk all laps and corners.

22a. Cut end of track so you can fold down to give it a better finished look. Do not fold down until doors are installed

23. Hang door(s) with proper equipment and weather conditions. Drill a 1/2" hole through Top frame and hat trim and hang with bolt. If you do hang bare frame by hand INSTALL HAT TRIM FIRST!!! Slide trolleys through end of track.

24. Adjust trolley height so door is level across the top and plumb on the jambs; make sure doors are same height and are plumb when pulled together. Once set, tighten up lock nut.

25. Fasten trolley adjustment washer with 4) 10 x 1 screws. Adjust door so there is at least 1/4" gap between door and header. Door should overlap header 1/2‟ to 3/4".

26. Pull vertical frame cover tight to vertical frame & fasten with trim screw. Do this in centers of trim pieces, top/bottom, and splices

27. Install track stops, set them so doors hit stop when door is flush with opening. Fold down track cover and caulk edges.

28. Install jamb boards; can be done before door is installed. Use 2x2 over girts or 1.5" x 3" nailed to post. Set bottom of jamb board flush with bottom of door

29. Drill at least 15” diameter hole for center Guide. CLEAN OUT LOOSE DIRT! You can fill hole with concrete for wet set Or use 180 lbs of sac-crete with 4 ply 2x6 post

30. Install Center guide centered in opening flush with outside of building frame. Ideally use 3 60# bags, 1 bag bottom 2 around. 2x6 treated post cleats ideal on bottom.

32. Cut post off 1” below door height, check height by sliding door(s) to the post, not by string or laser from heights at jambs. If post wasn’t beat to submission, pull out and Start over with step 29 with fresh sac-crete

31. THE MOST IMPORTANT & CRUCIAL STEP FOR POST MOUNT CENTER GUIDE. BEAT POST UNTIL YOUR WORE OUT THEN LET SOMEONE ELSE SWING UNTIL THEY DROP

33. Install center guide with 8) 5/16 x 1.5” lag bolts, Slide door over and latch to see If it’s all working. We do have adjustment plates available if post settles or plates can be removed

34. Install door roller guide, bearings need to be check height by sliding door(s) to the post, 1/4” behind inside plane of door panel to have room for “J” guide to fit free between door and roller. Drill 2) 1/4” holes center of slot and tighten up both bolts

35. Install CB2000 clincher bracket with 2) 5/16 x 3½” Lag bolts 1½” out from opening and center of bottom C channel. 2x2 jamb board goes between clincher & Door opening.

36. Install J guide so theirs’s ½” gap above bearing bolt. Set height by sliding door starting at jamb, middle, then end. *NOTE, STEEL ABOVE J GUIDE GETS INSTALLED AFTER

37. Install jamb trim. U may want to remove roller bearing so door can be opened beyond center, notch so it sits on J guide & wraps over 2x2 flush w/ base of the door

38. Fasten B18 jamb latch clincher against back side of jamb vertical with 4) #10 screws 57”- 66” above bottom of door. Be careful with torque, screws snap. Allow room below girt for jamb latch. On double Doors make sure both sides are same height

39. Install jamb latch with 4) 1/4 “x 1½” lags. Make sure door is snug against jamb and door Is latched shut before Installing lags in smaller holes. allow 3/4“ gap between clincher and latch. On double doors make sure there set at same height. Be careful with torque, lags snap.

40. Install B19 jamb latch ramps; line up with jamb latch bearings so both bearings roll over bracket. Slide doors together and fasten the other ramp level (never mind the 8 pan-head screws on vertical frame cover)

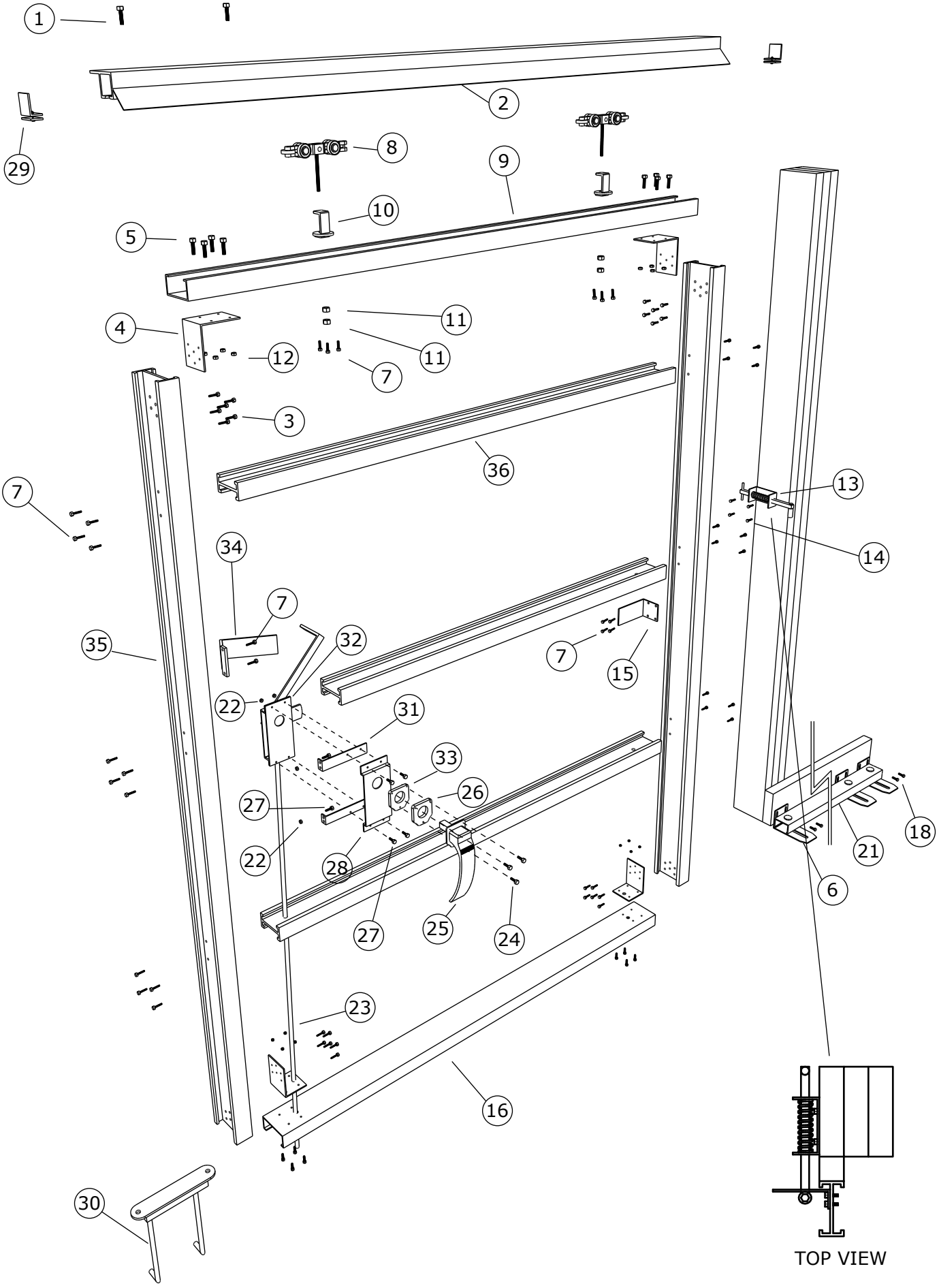
- Single doors are similar but latch side has CB1000 clincher with holes for latch rod to lock door, only if door is wider than 20’ then there is no center guide

- Doors wider than 18’ are typically Double panel doors, they are simply full-length top/bottom C’s with double verts in center of panel that are bolted together; they have B19 jamb latch ramps on double verticals in center of panel. Exterior steel can either be cut and trimmed over center verticals or just run steel over verticals (do not-pre-punch center sheet because screws might be in way of double vertical). The center trolley, that is spring loaded, doesn’t get 4 screws into the B20 washer, so the trolley never binds in track and load is disbursed evenly. There is a pass-thru center guide at the double vertical location

- Total time in installing this set of doors was 13 hours and book hours are 23; yes, this is an experienced crew and yes, they are more work than your typical quick frame, but substantially less work than hydraulic, bifold, and overhead, and will outperform all. I included time for header and door opening trim in the 13 hours it took installing door. Pad yourself a little the first 3; crew guys hate the 1st, 2nd is decent, 3rd is good, and 4th is I never want to see anything other than an I-Beam Door.

- E series manual will be coming soon, very similar in design just slightly different trim, frame, and brackets. Order of operation still the same and gets assembled in similar order.

If there is an issue or question please call Marc or Jon at 815-945-3667. We will walk you through it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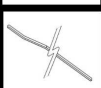
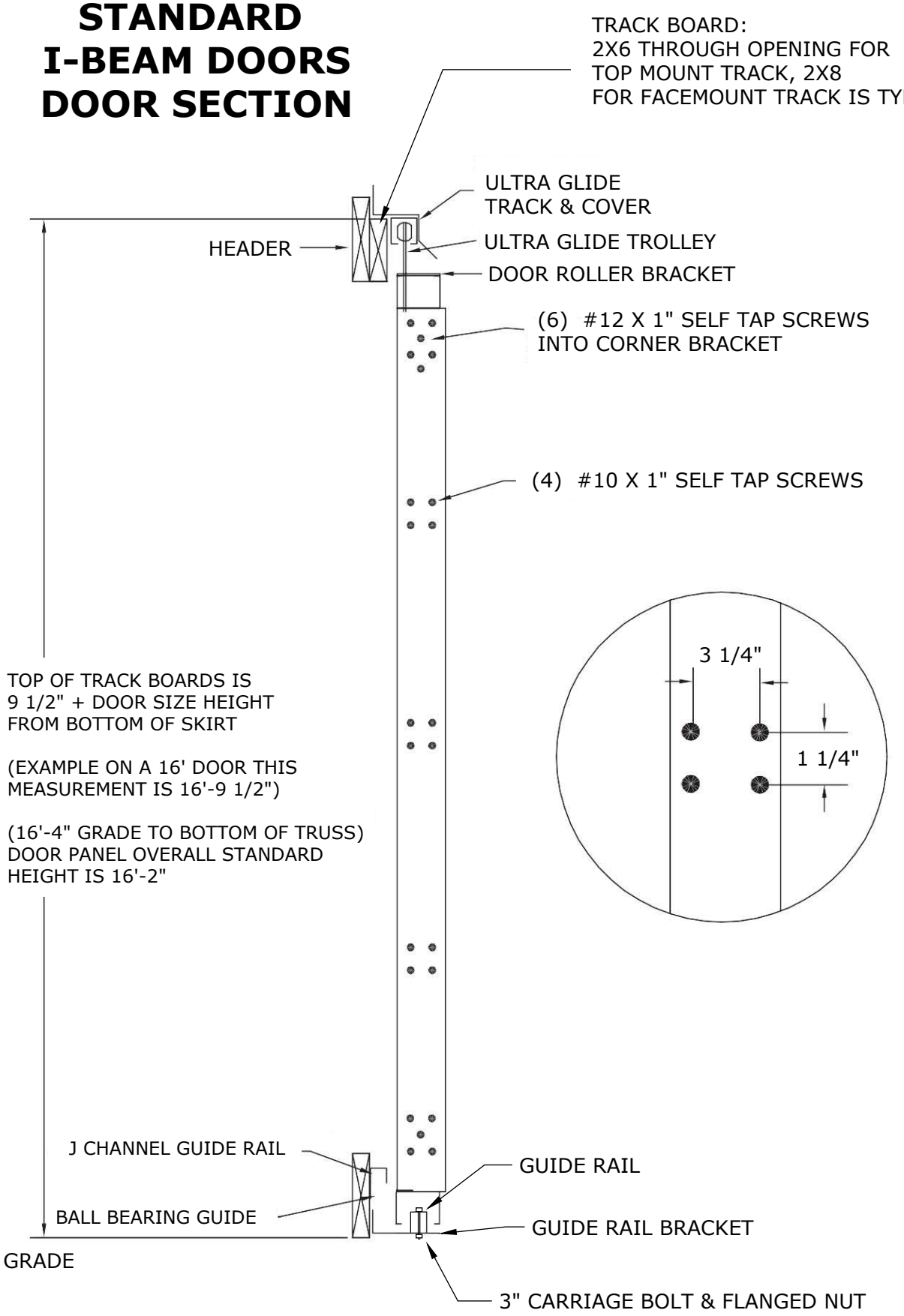
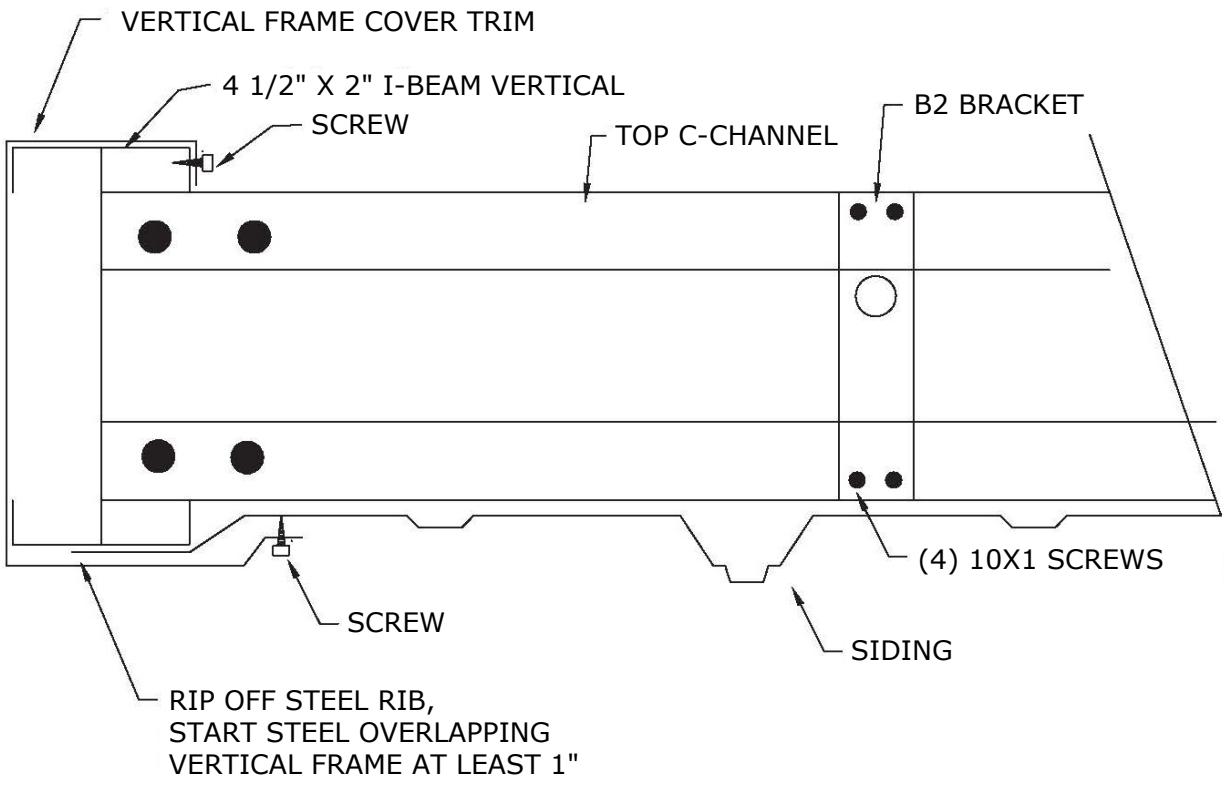
TOP VIEW

1		5/16” x 2 ½” or 3" Lag Bolts for Track	19		CB1000 (Clincher Bracket)
2		Ultra Glide Track	20		5/16" x 1 1/2" Lag Bolt
3		#12 x 1" Tek Screw	21		C-Channel Door Guide Rail
4		B1 Corner Frame Bracket	22		1/4" Flanged Nut
5		5/16" x 3/4" Flange Bolt	23		48" Latch Rod
6		B23 Bracket	24		#14 x 2" Tek Screw
7		#12 x 1" Tek Screw	25		Standard Exterior Handle
8		Ultra Glide Trolley	26		B11 Exterior Handle Spacer
9		Top C-Channel (2 inches shorter than bottom)	27		1/4" x 1" Flanged Bolt
10		B20 Eccentric Washer	28		B4 Exterior Handle Mount Bracket
11		1/2" Standard Nut	29		Track Stop Brackets
12		5/16" Flanged Nut	30		B5 Tabbed Center Door Guide Bracket
13		Jamb Latch Assembly (Spring Loaded)	31		B3 Center Assembly Mounting Bracket
14		1/4" x 1 1/2" Lag Bolt	32		Center Latch Assembly
15		B18 Jamb-side Latch ramp/clincher bracket	33		1/4" Rubber Gasket
16		Bottom C-Channel	34		B19 Latch-side Jamb Latch Ramp Bracket
17		5/16" x 3" Lag Bolt	35		Vertical Frame 4 1/2" x 2" Aluminum
18		5/16" x 2" Lag Bolt	36		Hortizontal (Girts) 3 1/2" x 1 3/4" Aluminum

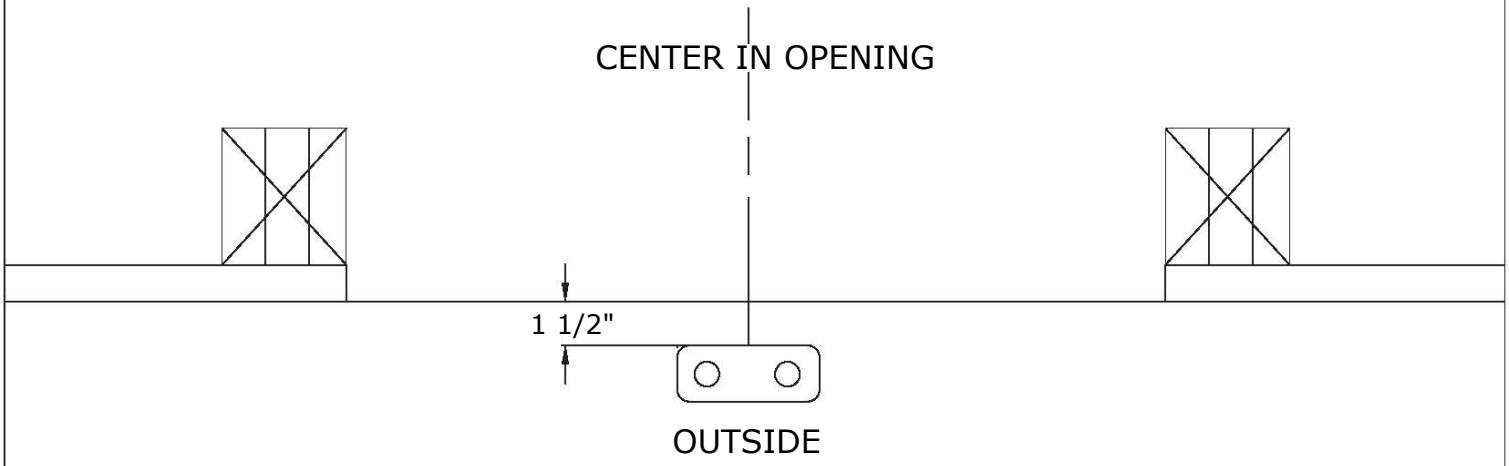
STANDARD I-BEAM DOORS DOOR SECTION



I-BEAM DOORS
DOOR DETAIL
TOP VIEW



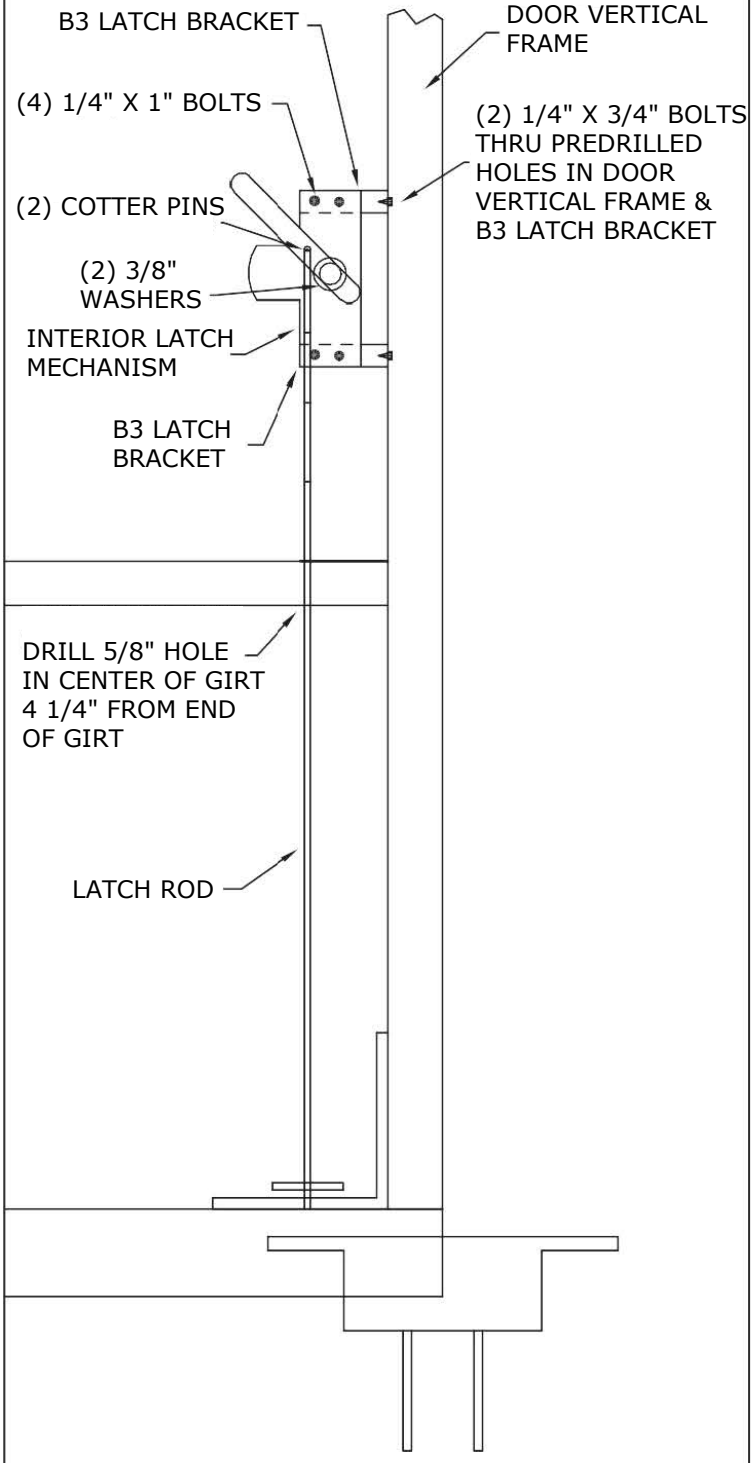
B5 CENTER GUIDE PLACEMENT



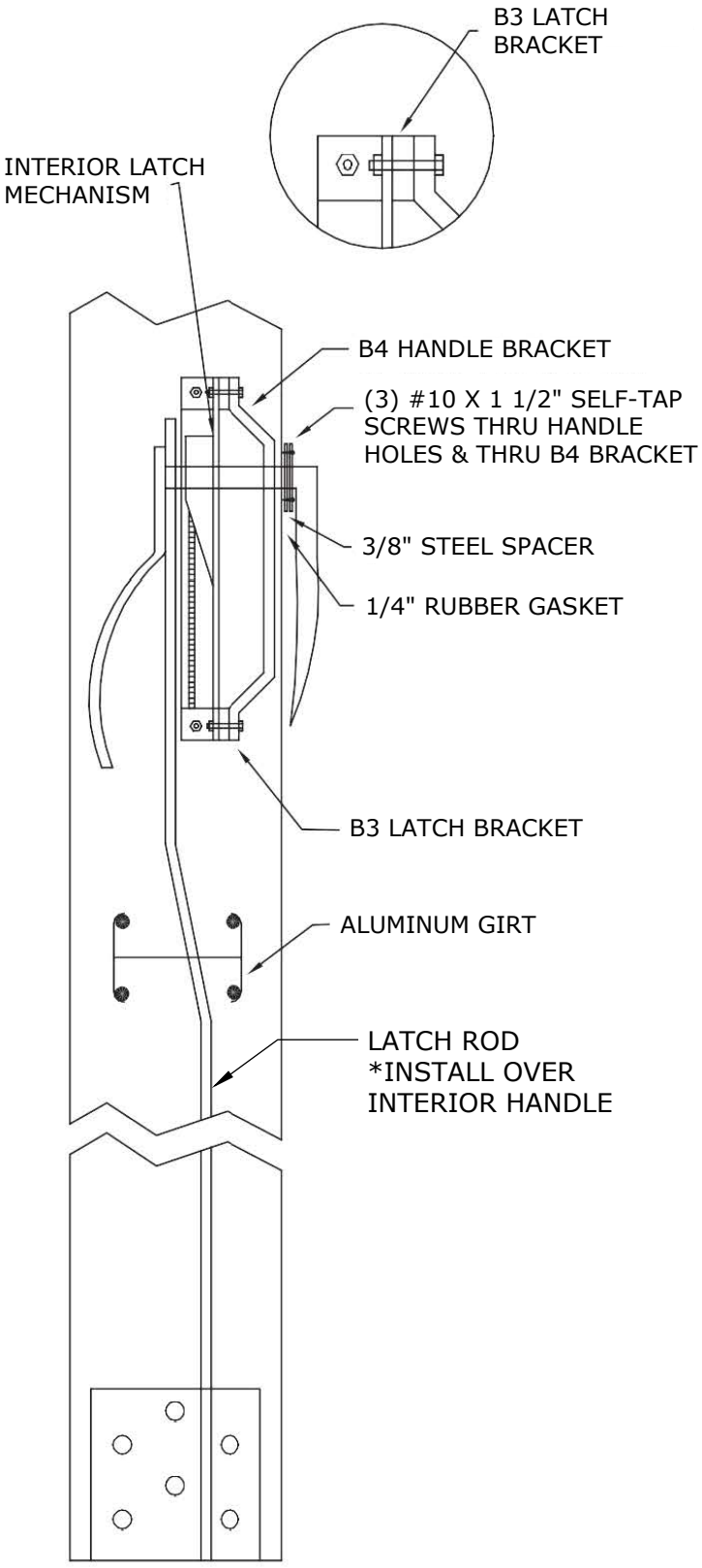
HEIGHT - ON STANDARD DOOR SIZES BASE HEIGHT NEEDS TO BE SET FLUSH WITH THE TOP OF THE FLOOR HEIGHT

STANDARD I-BEAM DOORS

INSIDE VIEW OF LATCH HANDLE MECHANISM

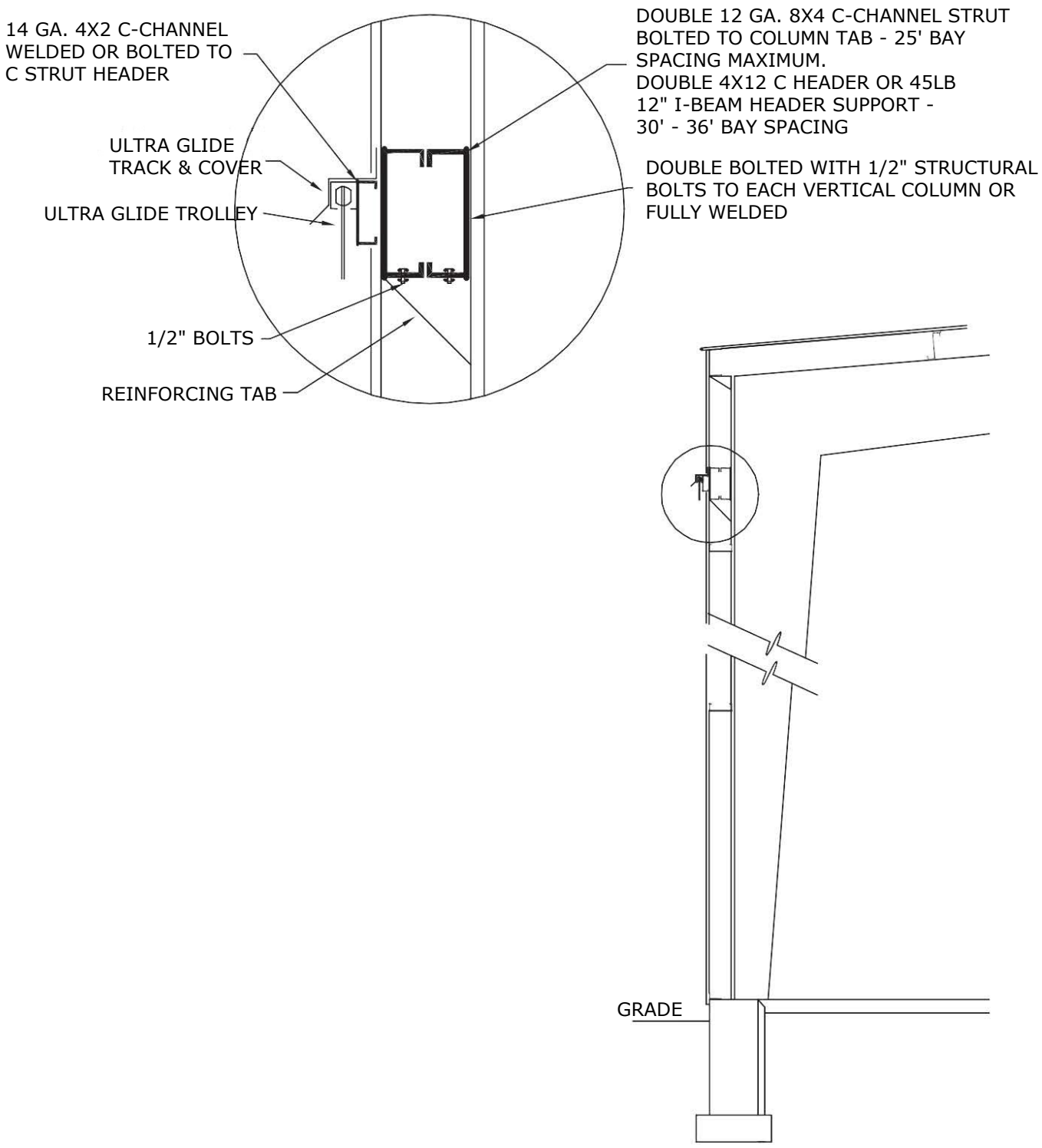


SIDE VIEW OF LATCH HANDLE MECHANISM

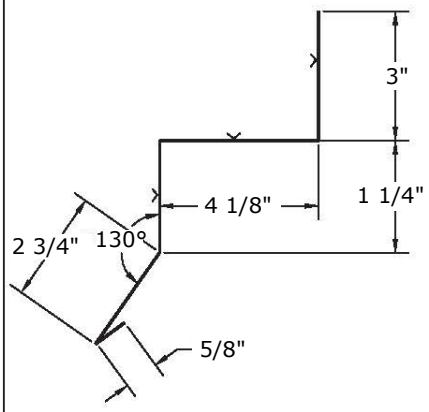


STANDARD I-BEAM DOORS

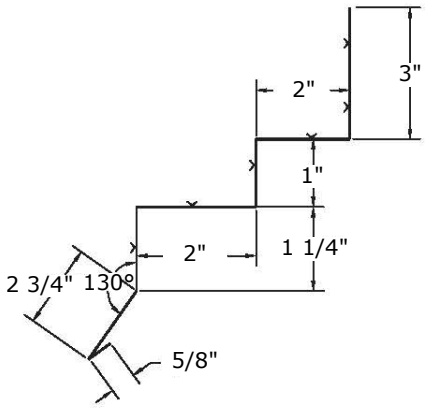
STEEL BUILDING CROSS SECTION FOR SLIDING DOOR HEADER



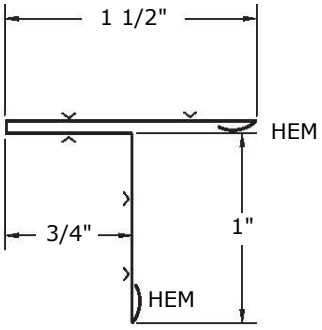
STANDARD
I–BEAM DOORS
TRIM PROFILES



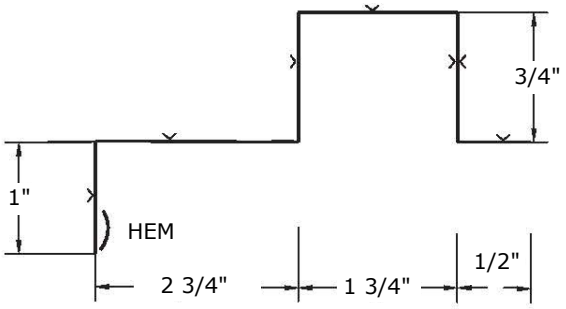
ULTRA GLIDE TOP MOUNT TRACK COVER



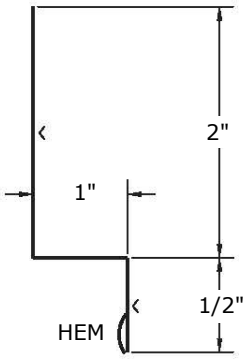
ULTRA GLIDE FACE MOUNT TRACK COVER



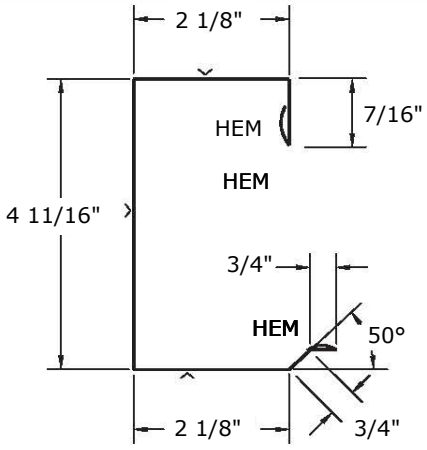
CENTER "T" TRIM



DOOR HAT TRIM



BOTTOM DOOR TRIM
(WAINSCOT TRANSITION)



VERTICAL FRAME COVER

INDICATES PAINTED SIDE