

# INSTALLATION INSTRUCTIONS FOR PLASCORE F5075 FRAME WALL

The following information is provided by Plascore, Inc., as a general guideline for the installation of the F5075 Frame Wall System. This information should be reviewed prior to commencing installation. The information is intended to be a general guideline, and may not address specific, custom situations which may appear on any particular project. Please consult Plascore, Inc., for any specific details or design applications.

This guideline assumes that the jobsite is clear and ready for the construction of cleanroom walls. The ceiling grid and the access floor, if applicable, are to be in place prior to beginning work on the wall system.

Installation instructions for Plascore doors are not included in this document. Please reference "Installation Instructions for Plascore Wide Stile Door" or "Installation Instructions for Plascore Narrow Stile Door".

## 1. UNCRATING, INSPECTION, AND INVENTORY

- A. All components of the wall system are clean room packaged for protection during shipping. All parts have been cleaned in the factory.
- B. Panels are shipped with a protective plastic film, which should be left intact until the panels have been installed, and ready for final wipedown.
- C. Contractor should visually inspect crates as they unload off trucks. Crates may be unloaded with standard forklift equipment. Note any crate damage, and inspect crates with obvious damage. Compare label on crate with packing slip, which is attached to Bill of Lading. Notify Plascore of any discrepancies between part number and quantities on crate label and packing list.
- D. Crates should be stored where they are protected from moisture, humidity, and temperature extremes.
- E. Parts may be left in crates until required for installation. Note any damage on parts at this time, prior to installation.

## 2. INSTALLATION OF HEADTRACK

- A. Consult the project spreadsheet for the part number for the headtrack assembly. The headtrack has factory-installed gasket.
- B. Special attachment details are used at corners and wall ends. Please see Sections 2A and 2B for these details.
- C. The headtrack has pre-drilled holes for attachment into ceiling grid. Attachment hardware is to be furnished by contractor. Plascore does not provide the attachment hardware for the headtrack to the ceiling grid, due to installer preferences, local codes, and varying ceiling grid designs. When determining the hardware needs, know that the T-groove at the top of the head track has an opening of 0.40", which a

bolt head must pass through, or for which a washer must span.

- D. Attach the headtrack to the ceiling grid per the project wall system layout. Attachment of approximately 24" on center is generally sufficient for most projects. Consult the project architect or engineer for any specific design loads or attachment requirements.
- E. The headtrack is to butt against additional lengths of headtrack for long runs of Plascore walls. The headtrack is to butt against the existing wall at a wall start. The headtrack is to butt against existing headtrack for a 90° T-intersection.

## **2A. INSTALLATION OF HEADTRACK CORNERS**

- A. There are two different headtrack corners available from Plascore. Consult the project spreadsheet for part numbers
  - a) If the headtrack has a T-groove integrated into the design, then a miter connector (part no. 830720) and set screws (part no. 840820) will be supplied. Cut two pieces of headtrack (with a miter on one end) from a length of headtrack. Install the miter connector by sliding the connector into the T-grooves in the headtrack and tightening down the fasteners.
  - b) If the headtrack does not have a T-groove, Plascore provides welded corners.
- B. Attach the headtrack corners to the ceiling grid per the project wall system layout. The headtrack corner is installed in a similar fashion to a length of headtrack. See Section 2 for details.
- C. Butt the square end of headtrack welded corner to an additional length of headtrack to continue Plascore wall assembly. It may be necessary to trim the square ends of the corner if paint build-up on the ends prevents a tight joint with the adjacent length of headtrack.

## **2B. INSTALLATION OF HEADTRACK WALL ENDS**

- A. There are two different headtrack wall ends available from Plascore. Consult the project spreadsheet for part numbers
  - a) If the headtrack has a T-groove integrated into the design, then a Head Track Wall End Cover will be supplied that can be screwed into the length of headtrack at the appropriate location. The length of headtrack should extend past the post at the end of the wall by approximately 1/8".
  - b) If the headtrack does not have a T-groove, Plascore will provide a welded wall end assembly that is 12" long.
- B. Install a headtrack wall end to the ceiling grid in the typical fashion (if applicable).

## **3. INSTALLATION OF FLOORTRACK**

- A. Consult the project spreadsheet for the part number for the floortrack.
- B. Special attachment details are used at corners, door openings and wall ends. Please see Sections 3A, 3B, and 3C for these details.
- C. The floortrack has pre-drilled holes. Attachment hardware is to be furnished by

contractor. Plascore does not provide the attachment hardware for the ceiling grid, due to installer preferences, local codes, and varying ceiling grid designs. When determining the hardware needs, know that the T-groove in the floortrack has an opening of 0.40", which a bolt head must pass through, or for which a washer must span. Typical hardware is screws or j-hooks into access floor, or concrete anchors for concrete slab.

- D. Attachment of 24" or 36" on center spacing is usually adequate for attaching floortrack. Use a fastener within 3" of end of the floortrack if possible. Consult the project architect or engineer for specific fastening requirements.
- E. Install the floortrack after the headtrack is installed. The floortrack is usually installed everywhere below the headtrack except at corners and door openings. The centerline of floortrack should be directly below centerline of headtrack. A plumb bob is usually used for this alignment.
- F. Carefully align (2) lengths of floortrack before attaching to the floor. You can order a T-bar splice (part no. 830715) and (2) set screws (part no. 840820) to help align the lengths of floortrack if desired. This T-bar splice will align the floortrack precisely at the butt joint, but is not necessary for installation of the wall.

### **3A. FLOORTRACK AT CORNERS**

- A. Unlike the headtrack corners, the floortrack is to stop short of the corner post assembly. The corner post extends to the floor, so the floortrack must be cut short of the outside corner by 2 5/8".
- B. Before mounting floortrack to the floor, attach a half mounting block (part no. 830682) to the end of each floortrack with (2) block screws (part no. 840805).
- C. An actual piece of corner post assembly can be helpful in aligning the floortrack pieces. If preferred, the full height corner post assemblies can be installed at this time, as described in Section 4 below.
- D. See Section 4 below, for detailed instructions for corner post installation.

### **3B. FLOORTRACK AT DOOR OPENINGS**

- A. An opening must be left in the floortrack layout for door openings. Please reference the appropriate Door Installation Instructions for either the Wide Stile Door or Narrow Stile Door.

### **3C. FLOOR TRACK AT WALL ENDS AND FRAMED OPENINGS**

- A. Wall ends and framed openings require openings in the floor track.
- B. Framed posts at wall ends extend to the floor. The wall end post includes a 3" Batten, so the floortrack should end 3" short of the wall end location.
- C. Clear openings for slider doors should be verified with the slider door manufacturer.
- D. For all wall ends and framed openings, attach a half mounting block (part no. 830682) to the end of the floortrack with (2) block screws (part no. 840805) prior to mounting the floortrack to the floor.

#### **4. CORNER POST INSTALLATION**

- A. Consult the project spreadsheet for the part number for the corner post assembly. Install the corner post assembly as floortrack is being installed. See Section 3A above.
- B. Pull back a short piece of the enclosure cap (part no. 830606) from the 2.5" batten (part no. 830593). This will allow the enclosure cap to be easily removed later for installing the panels. Note that the 2.5" battens are held in place by only one or two batten screws (part no. 840808). The additional screws are packaged separately, and shall be installed during the panel installation.
- C. The corner post assembly is pre-cut for length in the factory, ready for installation. Slip one end of the corner post into the headtrack and push to the top of the headtrack.
- D. Position the lower end of the corner post so that the flanges of the batten align with the half mounting blocks (part no. 830682) installed on the surrounding floortracks. Pull the corner post down tight to the floor. The top of the corner post should still sit within the headtrack corner.
- E. Connect each half mounting block to the corner post by inserting a T-nut (part no. 840807) with the accompanying T-bolt (part no. 840806) into the T-groove of the corner post. Slip the bolt head into the groove of the half mounting block, and tighten with a 3/16" allen head T-handle (yellow-handled, part no. 840323).

#### **5. INSTALLATION OF WALL STARTS AND T-INTERSECTIONS**

- A. Wall starts are defined as an abutment of the Plascore wall to another surface, such as an existing wall by others. T-intersections are defined as an abutment of the Plascore wall to another Plascore wall.
- B. Measure the distance between the top of the floortrack already installed onto the floor system, to the bottom edge of the headtrack above.
- C. Cut a floortrack to be utilized as a wall start 2" greater than the distance measured above. The wall start will extend into the headtrack by 2" and sit on top of the floortrack at the floor.
- D. A half mounting block (part no. 830682) may be installed into the bottom end of the floortrack/wallstart. Attach the mounting block half with (2) block screws (part no. 840805) with a 5/16" socket driver.
- E. Insert the top end of floortrack/wallstart into headtrack, then position bottom end over the existing floortrack.
- F. If a half mounting block was used to aid in this alignment, use a T-nut (part no. 840807) and T-bolt (part no. 840806) to connect them, ensuring that the T-nut is engaged in the T-groove of the floortrack mounted to the floor surface. Use a 3/16" allen head T-handle (yellow-handled, part 840323) to tighten the T-bolt.
- G. Attach the floortrack/wallstart to the vertical surface. Use appropriate fasteners for this attachment. Plascore does not supply these fasteners, because of the varied requirements for this attachment.

## 6. INSTALLATION OF WALL ENDS

- A. A wall end is the termination of a Plascore wall in an open area, such as a wing wall.
- B. Cut the floortrack back 3" from termination point. Install a half mounting block (part no. 830682) to the end of the floortrack with (2) block screws (part no. 840805) prior to mounting the floortrack to the floor.
- C. NOTE: Plascore has provided a post assembly that is 1" longer than the typical post assemblies for this application. Consult the project spreadsheet for part number. This post assembly is pre-cut at the factory, to fit within the headtrack and rest on the finished floor surface. First, pull back the enclosure cap slightly from the bottom end of the assembly for easy removal later. Push the top of the post into the headtrack, against the headtrack wall end cover. Pull the post down around the half mounting block attached to the floortrack. Attach the post assembly to the half mounting block by inserting a T-nut (part no. 840807) with the accompanying T-bolt (part no. 840806) into the T-groove of the post assembly. Slip the bolt head into the groove of the half mounting block, and tighten with a 3/16" allen head T-handle (yellow-handled, part no. 840323).
- D. To finish the exposed edge of the post assembly, measure full length of post, and cut to length a Glazing Clip None (part no. 830605). This ABS extruded part snaps into the T-groove of the post. The glazing clip fits flush with the edges of the T-batten.

## 7. INSTALLATION OF VERTICAL POSTS

- A. Vertical post assemblies are typically installed 48" or 1200mm on center. See the project wall system layout for clarity. These posts are factory cut to length to fit into the headtrack, and rest on the continuous floortrack. The bottom of the post assembly has a mounting block installed at the factory, which serves as the attachment into the floortrack. (Posts are also available in long lengths to be cut in the field. Mounting blocks are also available separately to be installed in the field.) Posts are typically installed on the same gridline as the cleanroom ceiling system overhead, which can act as a guideline during installation.
- B. Pull back the enclosure caps slightly from the bottom of the post assembly for easy removal later. (Enclosure caps must be removed for panel installation, and proper spacing of batten screws)
- C. Push the top of the post into the headtrack, and then pull the post down onto the floortrack at the proper location.
- D. Insert a T-nut (part no. 840807) and the accompanying T-bolt (part no. 840806) into the T-groove of the floortrack on both sides of the post. Slip the bolt heads into the grooves of the mounting block, and tighten with the 3/16" allen head T-handle (yellow-handled, part no. 840323).
- E. The spacing of posts may be interrupted at door modules or other openings. The floortrack should be previously cut for these openings (refer to Section 3B & 3C). The post spacing should continue on with the same center-to-center dimension

through and past all openings.

## 8. INSTALLATION OF HORIZONTAL POSTS

- A. Horizontal post assemblies are factory-cut to fit between vertical posts that are typically installed 48" or 1200mm on center. See the project wall system layout for clarity. Each end of the post assembly has a mounting block installed at the factory, which serves as the attachment into the vertical post.
- B. Pull back the enclosure caps slightly from the end of the post assembly for easy removal later (Enclosure caps must be removed for panel installation, and proper spacing of batten screws).
- C. Remove the battens from the vertical posts. Carefully slide the horizontal post between the vertical posts, taking care not to allow the mounting blocks to scratch the vertical posts.
- D. Once the horizontal post is in the proper location, insert a T-nut (part no. 840807) and the accompanying T-bolt (part no. 840806) into the T-groove of the vertical post on both sides of the post and at both ends of the post. Slip the bolt heads into the grooves of the mounting block, and tighten with the 3/16" Allen head T-handle (yellow-handled, part no. 840323).
- E. The vertical post battens can be reinstalled at this time or left off until after the panel installation.

## 9. INSTALLATION OF PANELS

*“Plascore materials must be protected from exposure to water or other contaminants. Plascore materials must not be stored where they are exposed to the elements. A panel with protective film must not get wet at any time.*

*Plascore materials should be stored at a temperature between 20° and 110° F. Storage at temperatures outside these limits may cause the protective film to be difficult to remove and/or it may leave residue on the panel. Plascore recommends that the protective film be removed within 6 months of purchase.*

*It is Plascore’s recommendation that the protective film be removed only 36 hours after the panel and film have reached 68-78 °F with relative humidity not to exceed 50%. Not following these guidelines may cause the protective film to be difficult to remove and/or it may leave residue on the panel.*

***If the protective film leaves residue behind, notify Plascore immediately before proceeding.*** - taken from the “Plascore Cleaning/Maintenance Guidelines”. Please refer to the complete document for more information.

- A. Before installing a panel, peel back the protective film on both surfaces of the panel around all four edges approximately 1". Leave protective film intact on face of panel for protection until final wipedown occurs.
- B. Remove the enclosure caps and battens from adjacent posts. Note that there are

only one or two batten screws installed at the factory to hold the batten to the vertical post. Batten screws (shipped loose) are to be installed approximately 12" on center after the panels have been installed.

- C. To install a panel, push one end into headtrack until it clears the floortrack. Position the panel over the floortrack and pull panel down until it sits all the way in the floortrack. The panels have been sized in the factory to leave a 1/8" gap per side between the panels and vertical posts for the typical wall system layout. The batten will cover the panels by 3/8" per side.
- D. The recommended option for cutting panels in the field is to use a circular saw with a fine-toothed carbide blade.
- E. Panels will typically need to be field cut for width at the end of a straight run. To determine the cut width of the last panel, measure between the batten and the vertical surface where the panel will end (typically a wall start or corner post assembly). The panel should be cut 3/4" more than this opening measurement, which will allow the panel to be grabbed by each vertical batten wing by 3/8", which is sufficient for holding the panel rigid.
- F. After panels are installed, re-install the battens to the vertical post. Fasten the battens to the posts with the supplied batten screws (part no. 840808). Typical spacing for the screws is 12" on center. (Consult the project architect or engineer for screw spacing for specific requirements.) Reinstall the enclosure caps.

## **10. FINAL INSPECTION AND WIPE-DOWN**

- A. Remove protective film from panels only after all installation steps have been completed.
- B. Wipe down panels and extrusions and door leafs with an approved alcohol wipe. If any chemicals are to be utilized in the cleaning process, spot check with extra materials prior to use to insure that the finish of the wall system is not affected.
- C. Consult Plascore's Maintenance and Cleaning Guide or a Plascore representative for specific cleaning issues.

## **11. RECOMMENDED TOOLS**

Following is a list of tools recommended by Plascore to install its F5075 Frame Wall System. This may not be a comprehensive list. Experience with the system and general construction techniques may help to personalize the tool choice for each contracting crew.

- a) Allen Head Wrenches: M8", 1/8", 5/32", 3/16" (yellow T-handle, available through Plascore.)
- b) #12 Phillips Screwdriver
- c) 5/16" Socket Drive and Ratchet
- d) 5/8" Open-Ended Wrench
- e) Soft Rubber Mallet

- f) Claw Hammer (to open Plascore crates)
- g) Circular Saw with Fine Toothed Carbide Blade
- h) Chop Saw or Miter Saw with Fine Tooth Carbide Blade
- i) Plunge Router with Double Fluted Carbide Tip Bit (Optional)
- j) Suction Cup Panel Holders

(End of Section)

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION WHICH MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE WITHOUT WRITTEN PERMISSION FROM PLASCORE INC.

# F5075

PROJECT NAME: \_\_\_\_\_  
 SUBMITTAL REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_

<p><b>2.38" No Groove Head Track Assy</b>        871007 Assy w/gasket        871023 Welded Corner</p>	<p><b>F5075 Floor Track Assy</b>        831114 w/ 0 half blocks        850355 w/ 2 half blocks</p>	<p><b>F5075 Post w/ 3" Batten Assy</b>        850357 w/ 0 blocks        850358 w/ 1 block        850359 w/ 2 blocks        850358 w/ 1 block/1 base</p>	<p><b>F5075 Post w/ 2.5" Batten Assy</b>        850360 w/ 0 blocks        850507 w/ 1 block        850362 w/ 2 blocks        850507 w/ 1 block/1 base</p>	<p><b>F5075 Corner Post Assy</b>        850534 w/ 0 blocks        870510 w/ 1 base</p>
<p><b>F5075 Floor Track</b>        831114        830682 Half Block        840805 Block Screw</p>	<p><b>F5075 Post</b>        831112        830592 3" T-Batten        830606 Enclosure Cap        840808 Batten Screw        830590 Mounting Block        840805 Block Screw</p>	<p><b>F5075 Post</b>        831112        830593 2.5" T-Batten        830606 Enclosure Cap        840808 Batten Screw        830590 Mounting Block        840805 Block Screw</p>	<p><b>F5075 Post</b>        831112        830593 2.5" T-Batten        830606 Enclosure Cap        840808 Batten Screw        830590 Mounting Block        840805 Block Screw</p>	<p><b>F5075 Post</b>        831111 Corner Post        830593 2.5" T-Batten        830606 Enclosure Cap        830658 2" Base Plate        840808 Batten Screw</p>
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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND TOLERANCES ON:

XXXXX = CRITICAL DIM LEVEL 2  
 XXXXX<sup>3</sup> = CRITICAL DIM LEVEL 3

FRACTIONS: = ± 1/16  
 DECIMALS: X=±0.1  
 .X=±0.06  
 .XX=±0.03  
 .XXX=±0.01

ANGLES: = ± 2°

CAD# MATRIX F5075a

PLASCORE  
 615 N. FAIRVIEW STREET  
 ZEELAND, MICHIGAN 49464  
 (616) 772-1220

COMPONENTS FOR  
 F5075 WALL SYSTEM

SIZE FSCM DWG NUMBER REV  
 A 39212 MATRIX F5075 A

DRAWN BY: A. SCHOUMAN DATE: 11/22/02  
 ENGRG: QC APP.  
 SCALE: NTS SHEET: 1 OF 1

REV.	DATE	DESCRIPTION	SIGNATURE
A	06/09/03	Added Glazing Clip information	A.Schoومان