INSTALLATION INSTRUCTIONS FOR PLASCORE SL2550 STUDLESS WALL

The following information is provided by Plascore, Inc., as a general guideline for the installation of the SL2550 Studless 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 addition 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 2" Batten, so the floortrack should end 2" 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. NOTE: Plascore has provided a post assembly 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).
C. 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 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. 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 1-1/4" gap between the panels for the typical wall system layout. The batten will cover the panels by 3/8" per side.

C. Panels are typically installed on the same gridline as the cleanroom ceiling system overhead, which can act as a guideline during installation.
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 ¾" 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.

8. INSTALLATION OF 3-PIECE BATTENS

A. The gap between the panels is to be closed off with a 3-piece batten set, which also ties the panels together creating a rigid wall system.
B. Install the 2.0" Front Batten (part number 831125), which includes a continuous screw boss, by inserting one end into the head track between two panels, and pulling it down until the bottom is tight against the upper edge of the floor track.
C. Remove the enclosure cap (part number 830606) from the 2.0" T-Batten assembly. Install this batten in the same manner as the other batten so that the two face each other.
D. Fasten the two together with the supplied batten screws (part number 840819) (1/4"-20 x 1 1/8" low head socket head cap screws), tightening with a 1/8" allen wrench until the battens are gripping the panel firmly. Typical spacing for the screws is 12" on center. (Consult the project architect or engineer for screw spacing for specific requirements.) Re-install the enclosure caps.

9. 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.

10. RECOMMENDED TOOLS

Following is a list of tools recommended by Plascore to install its SL2550 Studless 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

Often there is a need for a large quantity of windows in a Studless Wall. One option is for Plascore to provide a Window Panel (a 1.88" panel that has a window frame installed in the middle).

Another option is to replace some of the batten sets with F2550 post assemblies and use the post assemblies to frame in windows (as in Plascore's Frame Wall Systems). After the posts are installed, the posts look identical to the batten sets. This allows for greater flexibility in the field and shorter lead times. The panel in a typical 48" or 1200mm module does not need to be trimmed for width, but will need to be cut down for height.

1. REMOVAL OF BATTENS AND PANELS

A. Remove the enclosure caps from the batten assemblies to be removed. (A knife blade or other thin blade may help in removing these caps.) Remove the batten screws and battens.
B. Remove the panels by lifting up to clear the floortrack and then swinging out.

2. INSTALLATION OF VERTICAL POSTS FOR WINDOWS

A. These post assemblies 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.
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).

3. INSTALLATION OF HORIZONTAL POSTS FOR WINDOWS

A. 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 left off until after the panel installation.

4. CUTTING AND INSTALLATION OF PANELS ABOVE AND BELOW WINDOWS

A. Measure the distance between the top edge of the floortrack and the lower edge of the batten on the lower horizontal post assembly. Add ¾" to this dimension for the panel height for the lower panel.
B. Measure the distance between the top edge of the batten of the upper horizontal post assembly and the lower edge of the headtrack. Add 1" to this dimension for the panel height for the upper panel.
C. As listed before, the recommended option for cutting panels in the field is to use a circular saw with a fine-toothed carbide blade.
D. Install panels as described above.

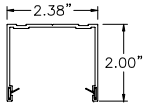
5. INSTALLATION OF GLAZING AND GLAZING CLIPS

A. Measure the distance between the top edge of the batten of the lower horizontal post assembly and the lower edge of the upper horizontal post assembly.
B. Add ¾" to the above dimension for the height of the glazing. The above dimension is the length of the vertical Single Glazing Clips. Cut (2) pieces of Single Glazing Clips (part number 830603) at this length.
C. Measure the distance between the inside edges of the battens of the vertical post assemblies.
D. Add ¾" to the above dimension for the width of the glazing. Add ¼" to the above dimension for the length of the horizontal Single Glazing Clips. Cut (2) pieces of Single Glazing Clips (part number 830603) at this length.
E. Consult Plascore for part numbers for Glazing Clips if using something other than one piece of ¼" glazing.
F. After cutting the glazing to size, set the glazing in place. Snap the horizontal Single Glazing Clips in place. Then, snap the vertical Single Glazing Clips in place.
G. Replace the battens and enclosure caps.

(End of Section)

SL2550

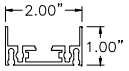
PROJECT NAME:_____
SUBMITTAL REVISION:_____
DATE:_____
APPROVED BY:_____



2.38" No TGroove Head Track Assy
871007 Assy w/gasket
871023 Welded Corner

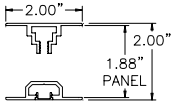
831933 Head Track 2.38" No TGroove
830686 HT Gasket

Other styles also available



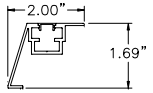
F5075 Floor Track Assy
831114 w/ 0 half blocks
850355 w/ 2 half blocks

831114 F5075 Floor Track
830682 Half Block
840805 Block Screw



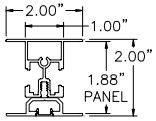
SL2550 Three Piece Batten Set
840558 2" T-Batten w/ Enc Cap
831125 Front Batten

830647 2" T-Batten
830606 Enclosure Cap
840819 Batten Screw



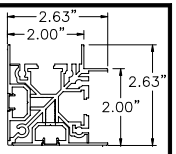
SL2550 2" Window Batten Set
840416 2" Window Batten w/ Enc Cap

830673 2" Window Batten
830606 Enclosure Cap
840819 Batten Screw



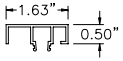
F2550 Post w/ 2" Batten Assy
871027 w/ 0 blocks
871008 w/ 1 block
871009 w/ 2 blocks

831934 F2550 Post
830647 2" T-Batten
830606 Enclosure Cap
868008 Batten Screw
831938 F2550 Mounting Block
840805 Block Screw

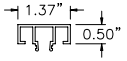


F5075 Corner Post Assy
850534 w/ 0 blocks

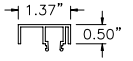
831111 Corner Post
830593 2.5" T-Batten
830606 Enclosure Cap
830658 2" Base Plate
840808 Batten Screw



830603
Single Glazing Clip
to hold (1) 1/4" pnl or glazing



830604
Double Glazing Clip
to hold (2) 1/4" pnl or glazing



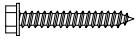
830613
Half Glazing Clip
to hold (1) 1/2" pnl or glazing

840819
LHSHCS 1/4-20 X 1-1/4
SL2550 Batten Screw

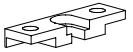
840808
LHSHCS 1/4-20 x 3/8
Batten Screw@CornerPost

840806
BHSHCS 5/16-18 x 5/8
T-Bolt @ Half Mtg Block

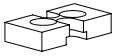
840807
T-Nut 5/16-18
T-Nut @ Half Mtg Block



840805
HWSLSMS 12-14x1-1/2AB
Block Screw



830682
Half Mounting Block
@ corner posts & doors



831938
F2550 Mounting Block
between perpendicular posts

868008
PPH 10-24 x 7/16
F2550 Batten Screw

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REV.	DATE	DESCRIPTION	SIGNATURE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND TOLERANCES ON:
XXXXX = CRITICAL DIM LEVEL 2
XXXXX^3 = CRITICAL DIM LEVEL 3
FRACTIONS: = ± 1/16
DECIMALS: X=±0.1
.X=±0.06
.XX=±0.03
.XXX=±0.01
ANGLES: = ± 2°

CAD# MATRIX SL2550

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

DWG TITLE
COMPONENTS FOR SL2550 WALL SYSTEM

SIZE	FSCM	DWG NUMBER	REV
A	39212	MATRIX SL2550	—

DRAWN BY: A. SCHOUMAN	DATE: 05/28/03
ENGRG:	QC APP.
SCALE: NTS	SHEET: 1 OF 1