



ATTENTION: To ensure proper clearance for all undersurface components, first locate the high spot of the floor using string & level &/or transit device (Fig. A).

Wall Rail Installation Steps

- Determine appropriate wall rail location
- Prepare structural wall for fasteners
- Install wall rails

Following steps are optional depending on order / configuration.

- Install wall tile inserts or other accessories
- Install lower wall rail face-plate
- Install upper wall rail face-plate

NOTE: National Office Furniture defines a structural wall as a load-bearing wall constructed of materials such as: poured concrete, concrete block, or studs. Wood studs must be minimum 2" X 4" nominal size. Metal studs must be "C" channel, 20-gauge thick minimum. Metal or wood studs must be on centers no greater than 24", have a maximum height of 14' & be restrained at floor & ceiling. Interior walls shall be designed to resist not less than a force of 5 lbs. per square foot applied perpendicular to wall. The deflection of such walls under a load of 5 lbs. per square foot shall not exceed 1/240 of the span for walls with brittle finishes, & 1/120 of the span for walls with flexible finishes (per Uniform Building Code Section 2309b). If you have any questions concerning load-bearing structures, please consult your architect or structural engineer.

1

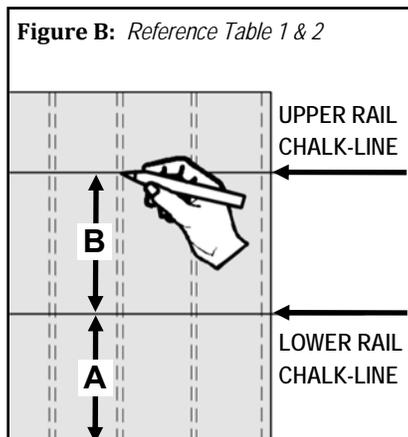
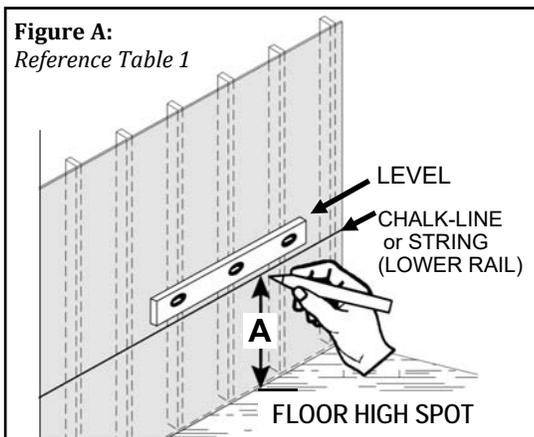
Reference Table 1 to determine lower rail position according to desired surface height of rung & set chalk-line / string at appropriate level height from floor, Dimension "A" (Table 1 / fig. A). Measure along the entire length of string to ensure minimum height is maintained (fig. A / Dim. "A") and is level. If a high spot in floor is identified, then reestablish height by repositioning string to Dim. "A" from highest elevation. Relevel & verify minimum clearance along entire length of rung before snapping line. Locate & identify the structural wall's substructure (wall studs) along length of chalk-line.

Table 1: Lower Rail Location - Dimension "A" (Fig. A, B & N) Use spacing Lower chalk line is located per desired work surface height. Dim. "A" is minimum clearance required for Installation of standard NOF undersurface / support models (Ref. NOF Spec Guide & Price List).

SURFACE HEIGHT	DESK / SEATED	COUNTER	BAR / STANDING
Dimension "A" <i>Minimum Height from Floor</i>	724 mm	883 mm	1044 mm
	(28 1/2")	(34 3/4")	(41 1/8")

Table 2: Upper Rail location - Dimension "B" ± 0.8 mm (± 1/32") (Fig. B & N) Distance between chalk lines is determined by the nominal height of the Wall Insert model to be installed

34" Model	36" Model	37" Model	48" Model	49" Model
892 mm	954 mm	966 mm	1254 mm	266 mm
(35 1/8")	(37 9/16")	(38 1/32")	(49 3/8")	(49 27/32")



Exhibit™

Wall Rail Mounting

Package Contents

Qty Per Order / Option

- Wall Rail Extrusion
- Face-plate
- Splice Plates
- #10 X 1/2" Sheet Metal Screws

Recommend Tools

- Tape Measure
- Chalk-line or String
- Level or Transit
- Variable Speed Power Drill / Driver
- Power Miter Saw
- Drill Bits
- Flat Head Screw Driver
- Rubber Mallet

Recommend Fasteners (Not Included)

- Solid or Block Masonry
1/4" X 2 3/4"
Buildex® Tapcon®
Concrete Anchor Screw
- Wood Studs with 1/2" Drywall
#10X 2"
Type A Pan Head Sheet Metal Screw
ANSI/ASME B18.6.4 & SAE J933
- Metal Stud with 3/4" Drywall
1/4-20 X 2"
Hilti® Toggler®
Grade 5 Anchor Toggle Bolt

NATIONAL®

Telephone 800.482.1717
Fax 812.482.8800
www.NationalOfficeFurniture.com

Part #: 2303105
Revision: B

Printed in U.S.A.
© 2013 Kimball International, Inc.

Proper product installation, in accordance with these instructions, is the responsibility of the installing agent. If you have any questions concerning these instructions, please call National Customer Service 800.482.1717

Assembly Instruction



Skip Step 2, if upper wall rail is not being installed.

Upper wall rail is required for installation of various Exhibit® wall mount options such as shelving, storage, & wall tile inserts.

2

Reference Fig. B & Table 1 to determine upper rail location (Dimension B) that is appropriate for the wall insert size being installed. Mark & snap a level Chalk-line at the specified distance above the lower line. Locate & identify substructure (wall studs) as instructed in step 1.

3

Prepare structural wall along each Chalk-line by pre-drilling / installing appropriate fasteners, per the fastener manufacturer's guidelines.



ATTENTION: See sheet one for list of recommended fasteners & reference the NOF Specification Guide for additional requirements & considerations. It is the responsibility of the installing agent to select & install the proper fasteners into the structural wall. National does not furnish fasteners nor assume any liability for improper use thereof.

- Recommended wall fastener spacing is 16" on center, not to exceed 24".
- Any single wall rail section must be attach to the structural wall with a minimum of two solid anchor attachment points.
- Wall rail shall not extend more than 6" beyond the last anchor attachment (Fig. C)
- For rail alignment & orientation to Chalk-line reference figures D & E.

4

Measure upper & lower wall lengths & fastener positions identified in step 1.



NOTE: BEFORE YOU CUT

Refer to steps 5 & 6 for required joinery & cut allowances.

Figure C: End of Run

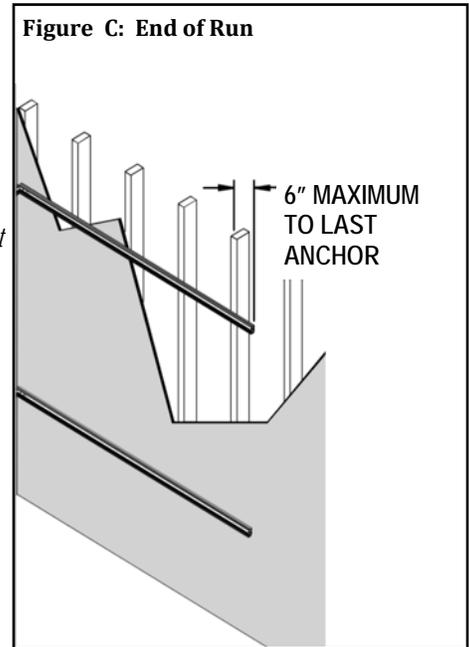


Figure D LOWER RAIL

LOWER CHALK-LINE

ALIGNMENT NOTCH

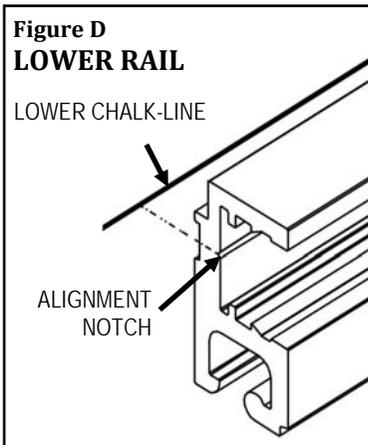


Figure E UPPER RAIL

CHALK-LINE

ALIGNMENT NOTCH

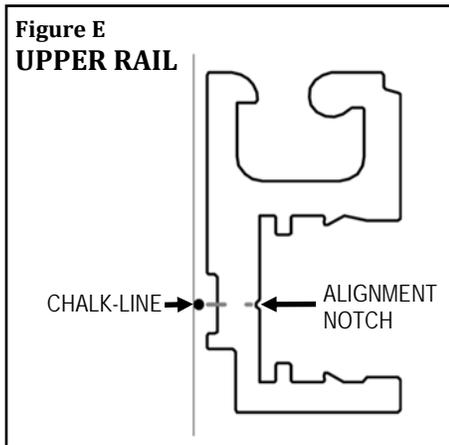
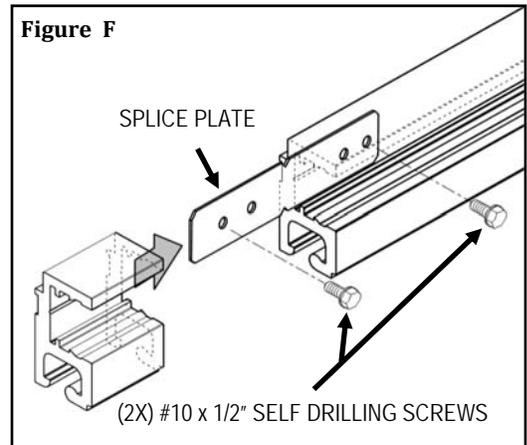


Figure F

SPLICE PLATE

(2X) #10 x 1/2" SELF DRILLING SCREWS



5

End to end alignment of two sections: Slide a splice plate into the channel at the back of the wall rail. Offset the "V" notch in the splice plate with between sections & attach using one self drilling screw per rail end section (Two screws per splice plate as provided, reference - Figure F).

6

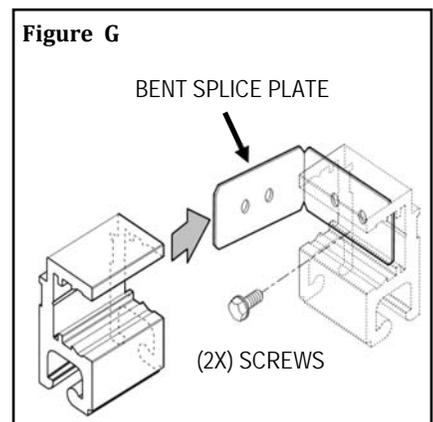
Alignment & joinery of corner intersection: Bend the splice plate at the "V" notch to the required. Attach each leg of splice plate with one self drilling screws (Two screws per splice plate as provided, reference - Figure G).

- **OUTSIDE CORNER (See Figure H):** Miter cut rail at appropriate angle & install bent splice plate, matching the walls where it is being secured.
- **INSIDE CORNER (See Figure I):** An allowance is required for the installation of the splice plate. The first length installed will be reduced by 1/4" & shall have splice plate installed prior to attaching rail to the wall.

Figure G

BENT SPLICE PLATE

(2X) SCREWS



Wall Rail & Face-plate Corner Transitions

7

Cut wall rails to desired length & predrill along alignment notch (Fig. D & E), per wall fastener manufacturer's requirements. Alignment notch on rail with the Chalk-line (Fig. D & E) & secure to the structural wall using appropriate fasteners. While installing fasteners along run, continually measure, ensuring level alignment with Chalk-line is being maintained.

THE LOWER WALL RAILS MUST BE INSTALLED FIRST

NOTE: If also installing a wall tile or other accessory panel insert, refer to the applicable accessory's installation instructions before proceeding.

If applicable, Align & Install upper wall rails to the structural wall using appropriate fasteners along rung (Fig. N). It is critical to hold the distance between upper & lower rails along the rung as specified ($\pm 0.8 \text{ mm}$ ($1/32''$) per Table 1, Fig. N)

Figure H: OUTSIDE CORNER - WALL RAIL

CONNECT MITER CUT WALL RAILS WITH BENT SPLICE PLATE.

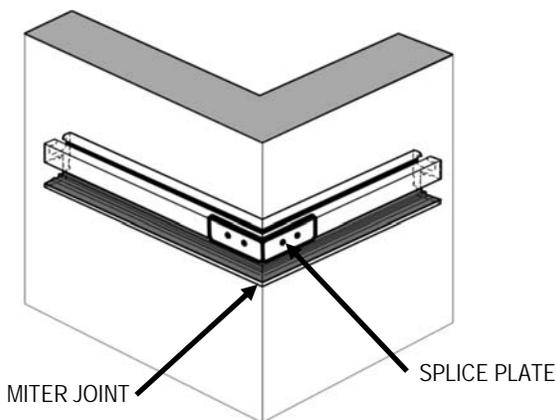
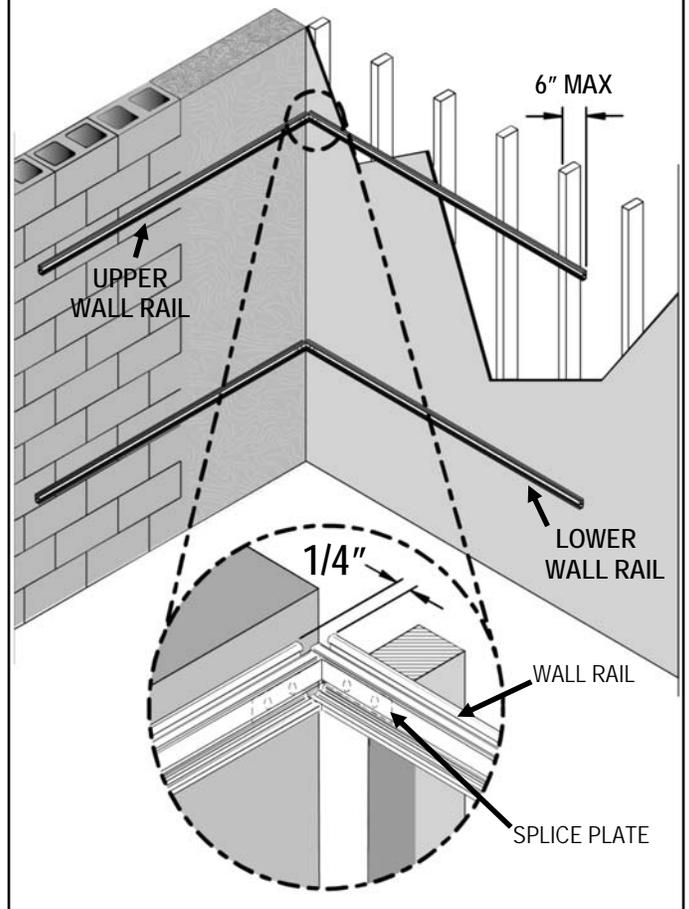


Figure I: INSIDE CORNER - WALL RAIL

The length of the first wall rail installed must be reduced by 1/4"



8

IF FACE-PLATE IS TO BE INSTALLED:

Measure & cut face-plate lengths. All inside & outside corner connections require mitered face-plate. (Fig. J & K).



NOTE: BEFORE YOU CUT

While cutting, the face-plate must be supported on the back side. Use either of the following recommendations.

- A. Snap face-plate into a scrap section of wall rail
- B. Place a sacrificial 1" x 4" board behind wall rail

9

FACE-PLATE INSTALLATION:

Align face-plate tabs in the receiving wall rail opening (Fig. L). Engage tabs by lightly hitting face-plate with a soft rubber mallet or palm of hand at one end until tabs snap in position (Figure M). Continue down the length of the face-plate until it is firmly in place. Inspect entire length of the face-plate to insure there are no bulges between the face-plate & the wall rail (Figure N).

Figure K: INSIDE CORNER FACE-PLATE

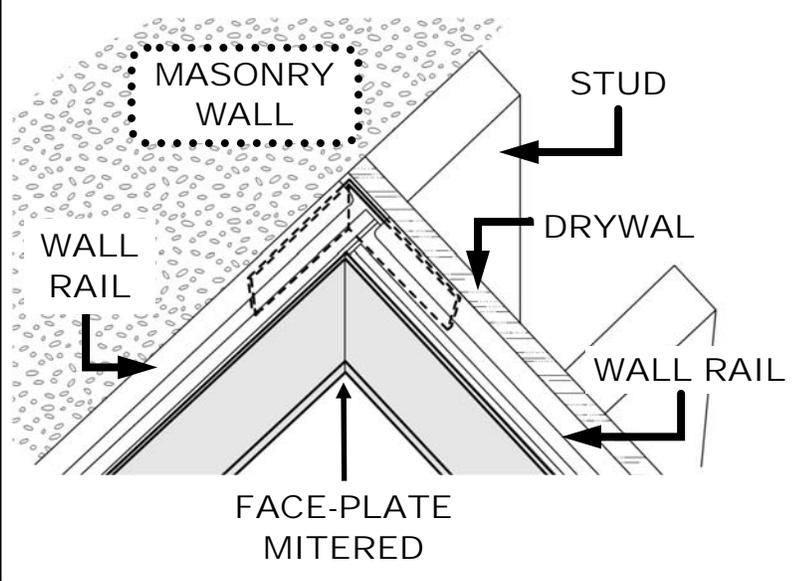


Figure L

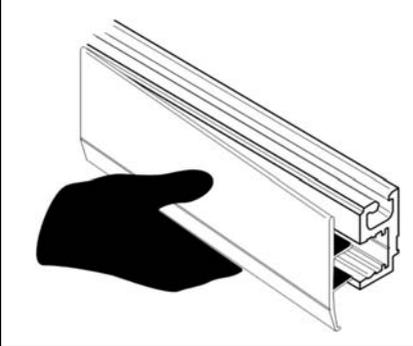


Figure M

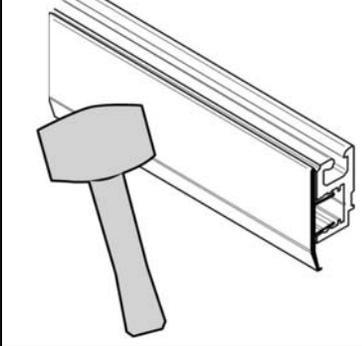


Figure J: OUTSIDE CORNER FACE-PLATE

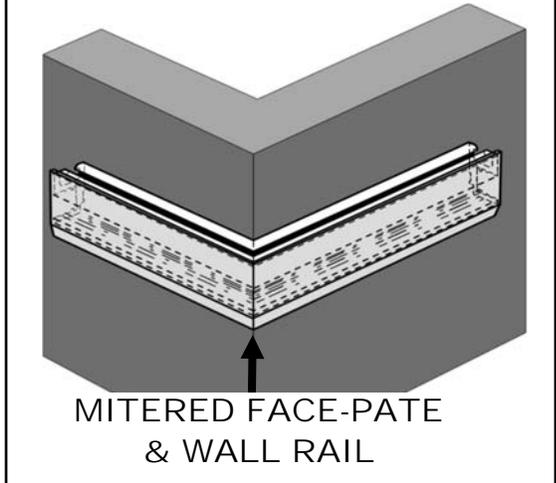
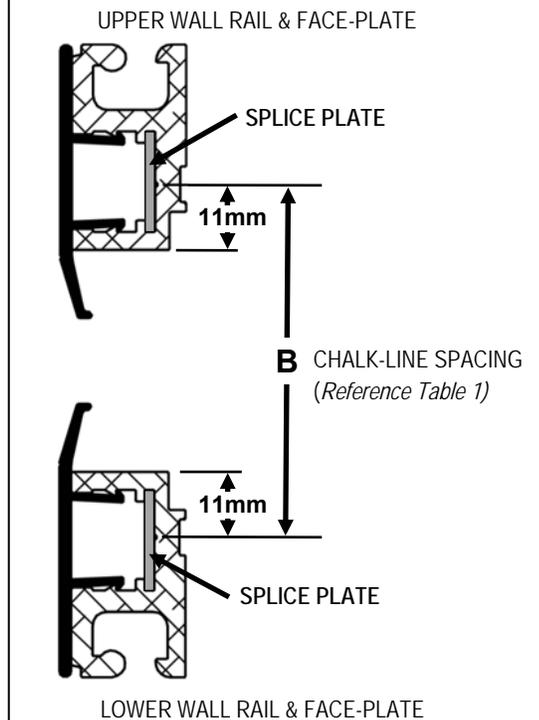


Figure N: RAIL & FACE-PLATE ORIENTATION



FACE-PLATE REMOVAL:

Insert the blade of a flat head screwdriver into the groove between the face-plate & the wall rail. Carefully push down & twist, releasing the face-plate's tab from the wall rail (Fig. Z). Move approximately 3" down the rail & repeat. Continue this process, until the entire length of the face-plate has loosened from the wall rail.

Figure Z

