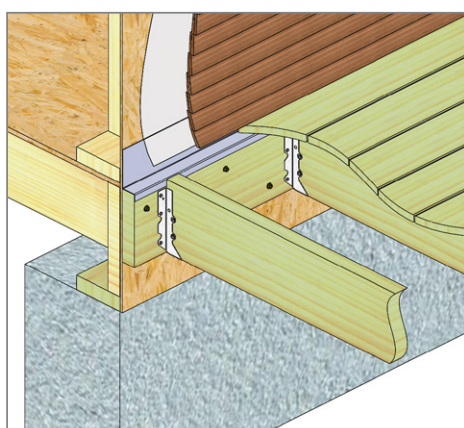


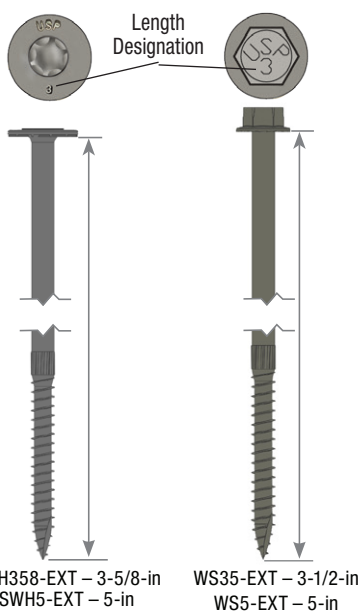
Attaching Deck Ledger to Rim Board Using MiTek USP WS Series Wood Screws

The MiTek USP WS series wood screws can be used to fasten deck ledgers to the rim board (AKA band/rim joist) of structures to meet the connection requirements of the International Residential Building Code (IRC). Both the standard hex head (WS-EXT) and washer head (WSWH-EXT) styles may be used for this purpose. Table R507.2 of the 2015 IRC calls out lag screws for deck ledger attachment and the WS-EXT and WSWH-EXT may be used in place of the lag screws.

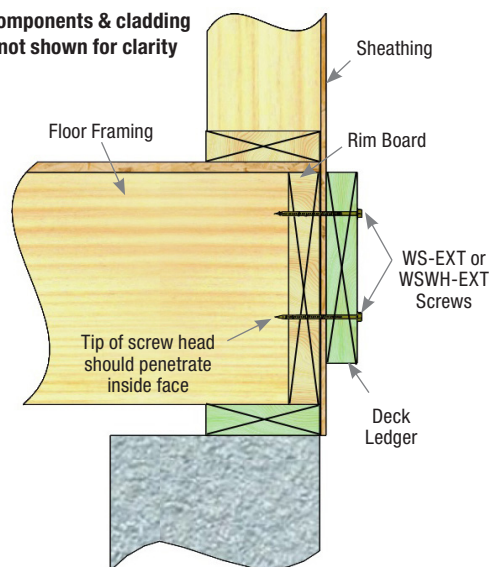


Perspective View

Head markings for identification



Components & cladding not shown for clarity



Section View

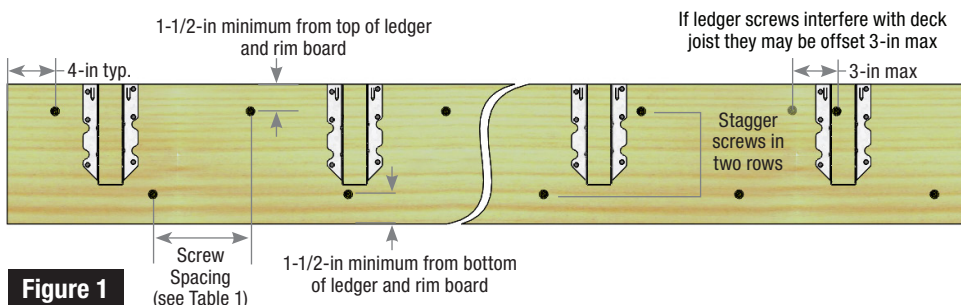


Figure 1

Installation:

1. Select the proper WS-EXT or WSWH-EXT screw length. The threads should have full engagement with the rim board with the tip of the screw protruding and visible beyond the inside face of the rim board member. See **Section View** image.
2. With appropriate screw length selected, drive the screw through the ledger, sheathing, and rim board with a high torque variable speed drill.
3. Drive screw so head is firm and flush with surface of deck ledger, but do not overdrive.
4. Repeat these steps and install the appropriate number of screws at the prescribed edge, end distance, and spacing as called out in **Table 1** and **Figure 1**.

Table 1

USP Stock No.	Live Load	Ledger	Rim Board	Spacing between WS-EXT / WSWH-EXT Screws based on Joist Span (in)						
				≤ 6-ft	≤ 8-ft	≤ 10-ft	≤ 12-ft	≤ 14-ft	≤ 16-ft	≤ 18-ft
WS35-EXT	40 psf	DF-L / SP / SPF	2-in Nominal Solid Sawn	23	17	13	11	10	8	7
WSWH358-EXT			1-in Min EWP	22	16	12	11	9	7	7
WS5-EXT	60 psf	DF-L / SP / SPF	2-in Nominal Solid Sawn	16	12	9	7	7	5	5
WSWH5-EXT			1-in Min EWP	15	11	8	7	6	5	5

1) Numbers are based on use of 3-1/2-in, 3-5/8-in and 5-in length screws. 6-in length screws (WS6-EXT or WSWH6-EXT) may be used with no reduction.
 2) Screw spacing based on requirements of 2015 IRC Section R507.2 and Table R507.2 and equivalent spacing of 1/2-in diameter lag bolts. Stagger screws into 2 rows.
 3) Multiple ledger plies should be fastened together to act as one unit independent of the WS-EXT or WSWH-EXT ledger attachment screws.
 4) Solid Sawn Rim Board shall be Douglas Fir-Larch (DF-L), Southern Pine (SP), or Spruce-Pine-Fir (SPF).

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