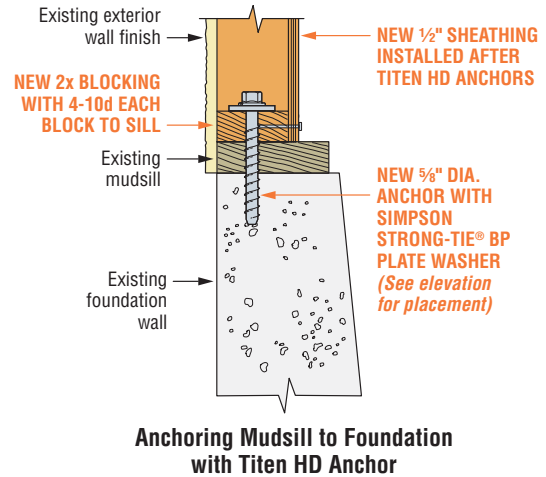


Installing the Titen HD® to Anchor the Mudsill

The Titen HD is a screw anchor that is used to anchor the mudsill to the foundation. It's easy to install with just a few tools.

Installation Details

- Anchor diameter: $\frac{5}{8}$ "
- Drilled hole depth: See table for embedment depth
- Anchor length: This will be determined by the thickness of framing and embedment depth. See table.
- Anchor spacing: 6' on center (o.c.) for one and two-story homes
- Washer: The Code requires a minimum 2"x2"x $\frac{3}{16}$ " thick steel plate washer (sold separately; Simpson Strong-Tie® BP $\frac{5}{8}$ satisfies the requirement). Some jurisdictions may require larger plate washers, such as the Simpson Strong-Tie BP $\frac{1}{2}$ -3 and BP $\frac{3}{8}$ -3. Contact your local building department for requirements in your area.

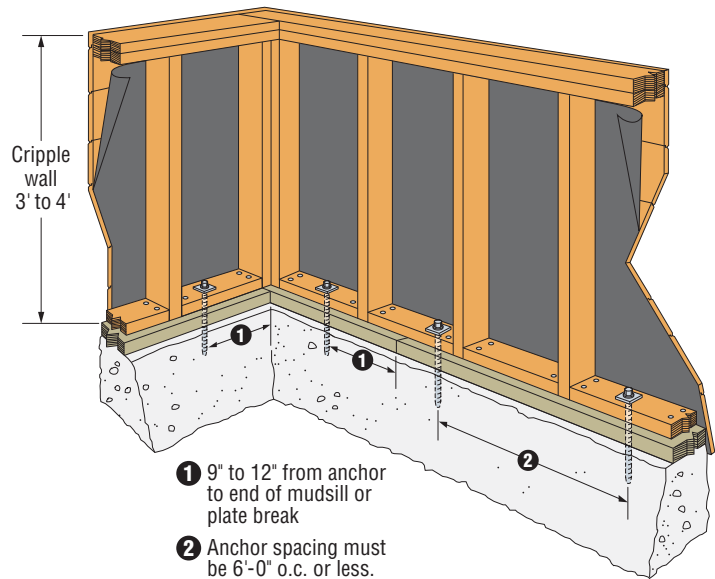


Note: Existing concrete may be too hard to install Titen HD® screw anchors. Please refer to www.strongtie.com/retrofitdetail for additional anchorage and installation options.

Table 1 – Determining Titen HD Length

Mudsill Thickness ¹ (in.)	Hole Depth In Foundation ² (in.)	Titen HD Model No. (Size)
1½	5	THD62600H ($\frac{5}{8}$ " x 6")
2	4½	THD62600H ($\frac{5}{8}$ " x 6")
2½	4½	THD62612H ($\frac{5}{8}$ " x 6½")
3	5½	THD62800H ($\frac{5}{8}$ " x 8")
3½	5	THD62800H ($\frac{5}{8}$ " x 8")

1. Mudsill may be single thickness or double if blocking is required for sheathing purposes.
2. Minimum required embedment for the Titen HD anchor in this application is 4". Hole depths above have been adjusted for available anchor sizes.



Instructions

1. Starting at each corner of the foundation, mark where each anchor will be installed. Make the first mark 12" from the corner (end of the mudsill). From the center of that anchor, measure and mark for a new anchor every 6'. A new anchor must also be placed a minimum of 9" and a maximum of 12" from every mudsill plate break. Reduce the 6' spacing between anchors if necessary to satisfy this requirement.
2. Using a rotohammer drill (with a $\frac{5}{8}$ " diameter bit) drill down through the center of the mudsill (or mudsill and blocking) into the top of the concrete foundation to the appropriate embedment depth shown in Table 1. (Note: Embedment is the depth of the hole from the top of the concrete, not the top of the mudsill.)
3. Clean the concrete dust from the hole using oil-free compressed air.
4. Insert the Titen HD anchor into the hole, with the square washer in place, and drive the anchor into the hole using a socket wrench or impact driver with a $\frac{15}{16}$ " socket. Drive the anchor until the head of the Titen HD anchor and the plate washer are snug against the mudsill.
5. Repeat steps 2-4 for each new anchor location identified in Step 1.

For materials and tools required, refer to worksheet on page 19.

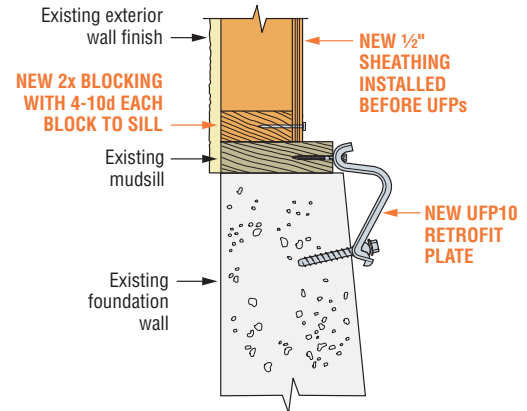
Installing the Universal Foundation Plate (UFP)

The UFP is a retrofit foundation plate that allows the cripple wall to be anchored to the foundation from the side. This allows the product to be used in applications where minimal vertical clearance exists.

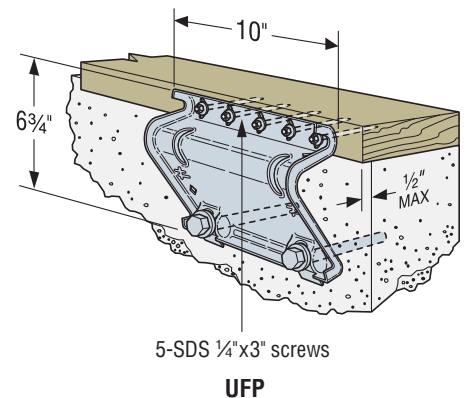
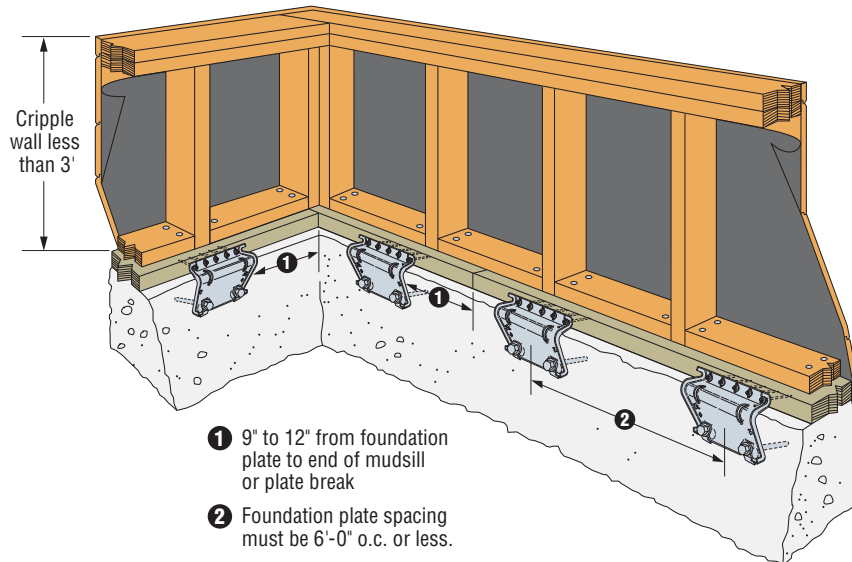
Installation Details

- Foundation plate: model UFP10
- Fasteners to mudsill: (5) Simpson Strong-Tie® SDS ¼"x3" screws (included with the UFP10)
- Anchors to foundation: (2) ½"x5" Titen HD® screw anchors (sold separately)
- Hole depth in foundation: 4¼"
- Foundation plate spacing: 6' on center (o.c.) for one- and two-story homes.

Note: Existing concrete may be too hard to install Titen HD® screw anchors. Please refer to www.strongtie.com/retrofitdetail for additional anchorage and installation options.



Anchoring Mudsill to Foundation with UFP



Instructions

1. Starting at each corner of the foundation, mark where each plate will be installed. Make the first mark 12" from the corner (end of the mudsill). From that point, measure and mark for a UFP every 6', with no plate being less than 12" from the break between two pieces of mudsill. If you need to adjust this spacing to account for a break in the mudsill or corner, reduce the spacing between plates.
2. Place the UFP against the bottom of the cripple wall and foundation so that it aligns correctly (as shown in the diagram above). Using a drill with a ⅜" driver attachment, drive the SDS screws into the side of the mudsill (or through the sheathing into the mudsill).
3. Using a rotohammer drill with a ½" diameter bit, use the UFP as a template and drill holes in the foundation 4½" deep. (Note: Embedment is the depth of the hole from the face of the concrete, not the face of the UFP.)
4. Clean the concrete dust from the hole using oil-free compressed air.
5. Insert the Titen HD® anchor through the UFP and drive the anchor into the hole using a socket wrench or impact driver with a ¾" socket. Drive the anchor until the head of the Titen HD anchor is snug against the UFP.
6. Repeat steps 2-5 for each UFP10 location identified in Step 1.

For materials and tools required, refer to worksheet on page 19.