YETI-ANCHOR® INSTALLATION PROCEDURES

Self-drilling the anchors through the insulation is possible with a standard ½” or 13mm hex deep well socket with at least 2” of depth. Pushing the Yeti-Anchor directly through the insulation is strictly NOT recommended as the bond between the anchor and lower concrete wythe may be compromised by large insulation fragments.

METHOD 1: SELF-DRILLING YETI-ANCHOR

1. Cut insulation boards to fit the panel then measure and mark anchor positions on the insulation boards. Reference the placement drawings for panel sizing and anchor spacing.
2. Prepare the lower wythe concrete bed, then place, vibrate, and screed the concrete to its designed thickness. Flat sheet mesh and concrete design mix using a superplasticizer admixture are recommended. Installer must ensure that the concrete has not reached initial set prior to installing anchors to ensure concrete remains in its plastic state during anchor placement.
3. Place the insulation boards according to the placement drawings. Place boards tightly into position and against concrete forms. Placement must occur on top of just-cast concrete while still in its wet or plastic state.
4. Drill in Yeti-Anchor by fixing a ½” or 13mm hex deep well socket into any traditional drill or driver. Utilizing the hex feature on the plastic collar, secure the Yeti-Anchor into the deep well hex socket. Set the drill’s rotational speed as low as possible (100 – 200 rpm). Position the tip of the Yeti-Anchor at the desired, pre-marked location on the insulation board, ensuring the anchor is perpendicular to the plane of the insulation board, and begin to drill. Only slight downward pressure is required, in most cases the weight of the drill alone is enough. Do NOT apply excessive downward force as this could cause excessive insulation blowout on the backside.
   • Insulation varies widely and will impact the effectiveness of the self-drill installation method.
   • Contact Dayton Superior to discuss the appropriateness of the self-drill method with your selected insulation type. See notes section below for more information
5. Consolidate concrete around anchors by walking on insulation near each row of anchors and applying foot pressure on each side of the anchor. This is to further ensure proper consolidation around the anchor. Mechanical vibration can also be used near each anchor or by use of bed vibration in precast/pre-stressed plants.
   • A consolidation check should be performed by removing 5% (minimum of 5) of the installed anchors from the panel; choose anchors in corners and center of insulation sheets. Wet concrete slurry should be present on the embedded end. Replace the anchor in the same hole and reconsolidate. If concrete slurry is not present additional consolidation measures are required.
   • Avoid disturbing the anchors and insulation after concrete has reached initial set.
6. Fill gaps in insulation prior to placing the upper layer of concrete. All exposed joints, gaps, and spaces in the insulation greater than 1/8” should be injected with expanding foam.
7. Prepare the top wythe once the bottom wythe has reached its initial set. Place the necessary reinforcing steel, lifting inserts, embeds, and concrete. Finish and cure the upper wythe per the project’s specifications.
8. Strip forms and remove excessive slag to minimize thermal bridging at panel edges after proper concrete set time. Strip forms and remove the panel from form bed and repeat the process as necessary.
**METHOD 2: Pre-Drilled Holes**

It is also possible to install the yeti anchors by use of insulation board that are either factory drilled or drilled on-site prior to placing on top of the lower concrete wythe. If this is the desired method, mark and drill a 5/16" hole in the appropriate anchor locations. Remove debris and insulation fragments from in and around the drilled holes. Once pre-drilled boards are placed over the wet concrete according to the placement drawings, immediately place the Yeti-Anchors through the pre-drilled holes in the insulation and into the wet concrete until the plastic collar is flush with the insulation. Then twist/rotate the anchor 90 degrees and wiggle the anchor to ensure concrete fully encloses the embedded end. Anchors MUST be placed while concrete is still in its plastic state prior to its initial set. Proceed with steps 5 through 8 of “METHOD 1: SELF-DRILLING YETI-ANCHOR” to complete the panel construction.

**IMPORTANT**

**WARNING**

Yeti-Anchors are very hard pointed and present a trip/fall hazard when fixed into a concrete surface with one end exposed. Take extreme care when walking over a panel with Yeti-Anchors protruding from the face of the insulation during panel manufacture.

**CAUTION**

Loose fiberglass fibres can cause mild to moderate skin and/or eye irritation. Wear appropriate Personal Protection Equipment (PPE) when handling.

It is the responsibility of the panel manufacturer to ensure concrete consolidation around the notched end of the Yeti-Anchor, per method 1, item 5.

It is the sole responsibility of the contractor or installer to install the Yeti-Anchor in accordance with these published installation procedures. Dayton Superior is not responsible for failures resulting from a failure to follow these published installation procedures.

Dayton Superior makes no representations to the performance of any panel fabricated with the Yeti-Anchor. The concrete wall panel manufacturer is solely responsible for the performance of all building system panels regardless of the installation procedure used.

Our recommendations should not be taken as inducements to infringe on any patent or violate any law, safety code or insurance regulation.

Concrete set times vary as a function of many factors, including (but not limited to): mix design, concrete temperatures, ambient temperature, and mix time. The installer MUST ensure that the concrete has not reached initial set before the anchors are installed.

Insulation varies widely, and this will impact on the effectiveness of this drill tool installation method. Consult Dayton Superior to discuss a specific insulation type used in conjunction with the self-drilling installation method. The following should be avoided:

- Insulation fragments in the concrete and around the notched Yeti-Anchor end (these may have been pushed out or dislodged by the Yeti-Anchor)
- Deformed insulation boards caused by the Yeti-Anchor pushing through the insulation lower film/membrane – sudden penetration can result in the film/membrane becoming loose. Insulation with film backing must be penetrated by the Yeti-Anchor and the film must not interfere with the notch.
- Cones of insulation punched out on the lower face of the insulation and into the concrete due to excessive downward force while drilling.