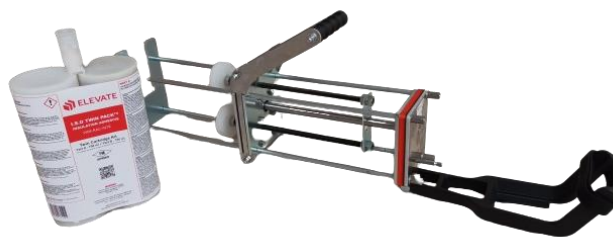


TECHNICAL BULLETIN

I.S.O. Twin Pack Adhesive Application

Introduction

The installation of Elevate I.S.O. Twin Pack Insulation Adhesive requires the use of a twin cartridge dispenser. Please contact your Elevate representative for the availability of this tool. This battery-free dispensing tool requires the need of an electrical drill machine, usually available on most jobsites. Make sure batteries are fully charged before usage.



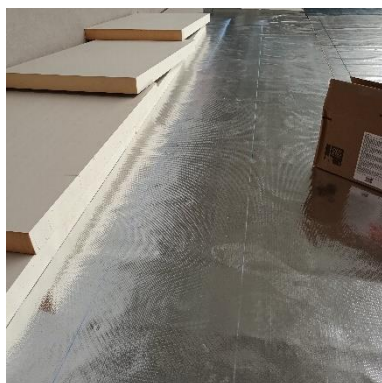
Wear protective gloves during installation. Read product brochure, TIS and SDS for further detailed information. Please note that this product contains a certain quantity of diisocyanates and therefore adequate training is required before professional usage (see www.safeusediisocyanates.eu for further information).

Coverage

One cartridge dispenses 40 to 45 lin.m of mixed adhesive in a bead 13 mm wide or covers an area of approx. 12 m² when installing at bead spacings of 300 mm o.c. This equates to the coverage area of about 50 m² per carton (typical spacing to be applied in the roof field area). A smaller spacing between beads might be necessary for roof areas where higher wind loads are to be expected. Please contact your Elevate representative for maximum allowed wind loads for your project. Coverage rate may also be reduced due to irregularities in the substrate.

Application

Follow below instructions for a proper application.



Step 1

Make sure the area to be covered is prepared before applying I.S.O. Twin Pack; Substrate is clean, smooth and dry. Substrate need to be properly fixed to the roof support and compatible for adhering insulation or cover boards.

Insulation boards are in position, ready to be installed (pre-cut, if necessary). Do not install board sizes bigger than 1200 mm x 1200 mm (local regulations may even require smaller board sizes)

For easy working, mark with a chalk line the location of beads.

Keep an empty (carton) box available at the starting place (i.e. to discard the first improper mixture, see further).

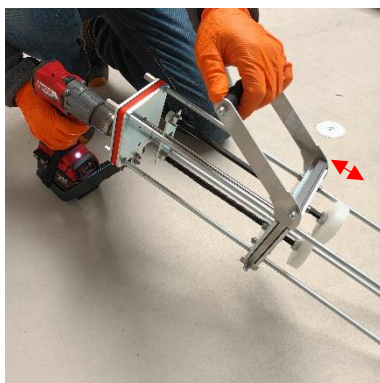
**Step 2a**

Tighten all bolts of the dispenser tool. Do this regularly when needed.

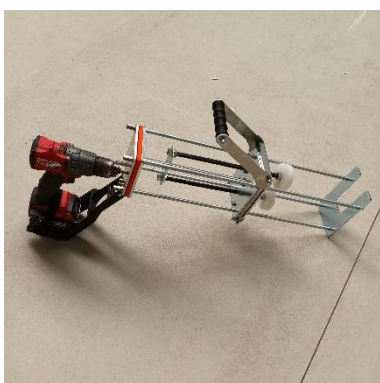
**Step 2b**

Install your drilling machine firmly onto the drill bit of the dispenser tool.

Place the black plastic support under the base of drill machine and tie the strap to hold it in place.

**Step 2c**

Set the pistons in start position using the drill machine by moving them approx. 1cm from the handgrip.



All set. Ready to proceed!



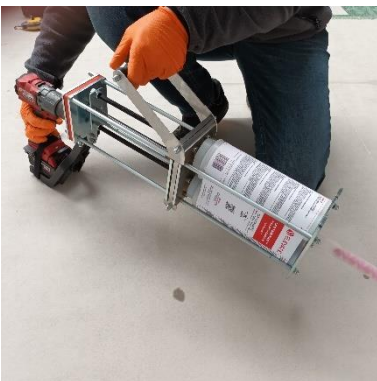
Step 3a

Remove the plastic plug from a new I.S.O. Twin Pack cartridge. Break off the seal by hand or tool. If needed, use a nail to make sure the cartridges are fully open on both sides.



Step 3b

Hand tighten the static mixer to the kit.



Step 4

Insert the I.S.O. Twin Pack cartridge in the dispenser carriage, positioned properly. Using drill machine slowly move the pistons forward so the cartridge is fixed in the dispenser tool.



Step 5

Hold the trigger of the drill machine to begin dispensing adhesive. Note: press the trigger gently – and not too hard – so pistons push forward with adequate speed.

It is necessary to pre-dispense a small amount of I.S.O. Twin Pack to ensure a proper mix. Discard the first few incomplete mixture into a (carton) waste box.



Step 6

Hold the gun at a 70° angle to the surface and ensure a distance of 1 to 2 cm between mixing head and surface. Install the I.S.O. Twin Pack Adhesive in approx. a 13 mm wide bead to the substrate in a spacing as specified for the project, using straight lines or serpentine pattern.



Adjust walking speed in function of the speed the insulation adhesive leaves the mixer to achieve the desire bead width of 13mm.



Step 7

Stop pressing the drill machine trigger when finished applying I.S.O. Twin Pack adhesive, reverse the pistons to their start position and remove the I.S.O. Twin Pack cartridge from the dispenser tool.



Step 8

If the I.S.O. Twin Pack cartridge is not empty yet, remove the mixer from the cartridge properly, and dispose the static mixer according data sheets and local requirements. Keep the cartridge in straight position and cover the opening from the kit with the plastic cap (for later continuation). Use a new mixing nozzle at re-use.

If the I.S.O. Twin Pack cartridge is empty, cartridge and mixer can be disposed assembled together, in accordance with local regulations.



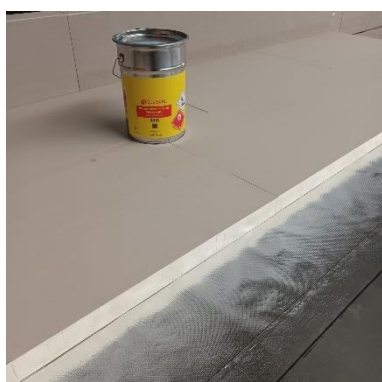
Step 9

The adhesive will rise within minutes after placement. Rise time will depend on the ambient condition. Do not allow adhesive to develop skin coat. Go to next step!



Step 10

Immediately set and press down the insulation or cover board (maximum 1.2 m x 1.2 m) in fresh insulation adhesive. The adhesive will set within minutes after placement.



Step 11

To ensure that the insulation boards and substrate are mated properly (especially on uneven substrates), it may be required to weigh down the freshly installed boards until the board is held in place by the adhesive, using full pails of Bonding Adhesive or other available sources of weight that will not damage the roof insulation.

The Elevate I.S.O. Twin Pack insulation adhesive sets in less than 10 minutes!

The insulation adhesive can be installed at ambient temperatures as low as -5 °C and up to 35 °C. When the insulation adhesive needs to be applied outside this temperature range, special precautions will be required. Store the material as long as possible at room temperature. Do not allow the insulation adhesive to freeze before installation. When the product is stored in cold temperature for extended period, keep the product in room temperature for min 4 hours before application. Use only when conditions allow, and daily trials indicate successful adhesion.

Remark:

This document is meant only to highlight Elevate products and specifications based on latest knowledge and experience and is subject to change without notice. Above Mentioned values are based on tested samples and may vary within applicable tolerances. For latest and complete product and detail information, please refer to the technical information posted on www.holcimelevate.com. Holcim Solutions and Products EMEA BV ("Holcim") takes responsibility for furnishing quality materials which meet Holcim's published product specifications. As neither Holcim itself nor its representatives practice architecture, Holcim offers no opinion on and expressly disclaims any responsibility for the soundness of any structure on which its products may be applied. The selection of the appropriate product and its correct application is the responsibility of the customer and not of Holcim. No Holcim Representative is authorized to vary this disclaimer.