LATICRETE® Waterproofing Membranes Tied Into Membrane Materials and Flashing

TDS 167

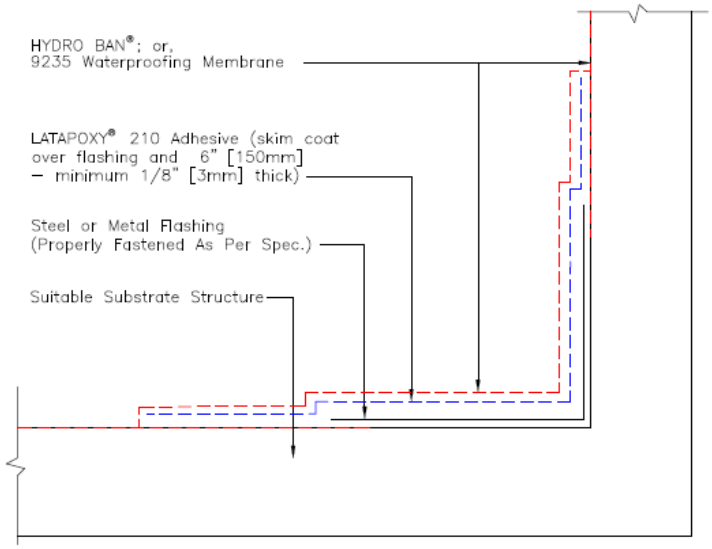
LATICRETE International, Inc. manufactures thin, load-bearing, waterproofing membranes over which tile and stone may be directly installed using LATICRETE® latex and polymer fortified thin bed mortars. Sometimes, existing job site conditions or design requirements present a need for LATICRETE waterproofing membranes to tie into other commonly used membrane or flashing materials.

The following methods should be observed for tying HYDRO BAN® and 9235 Waterproofing Membrane into the other commonly used membrane materials listed below. The following suggestions are simply an attempt to address some common conditions seen in the field. Ultimately, a test area should be conducted on the job site to confirm acceptable bond, placement, sequencing of work, and suitability of these materials and methods for specific job site conditions. The results of this test area should be reviewed by the manufacturer of the flashing or membrane materials that come into contact with the LATICRETE Systems Materials, as well as by the project design professional.

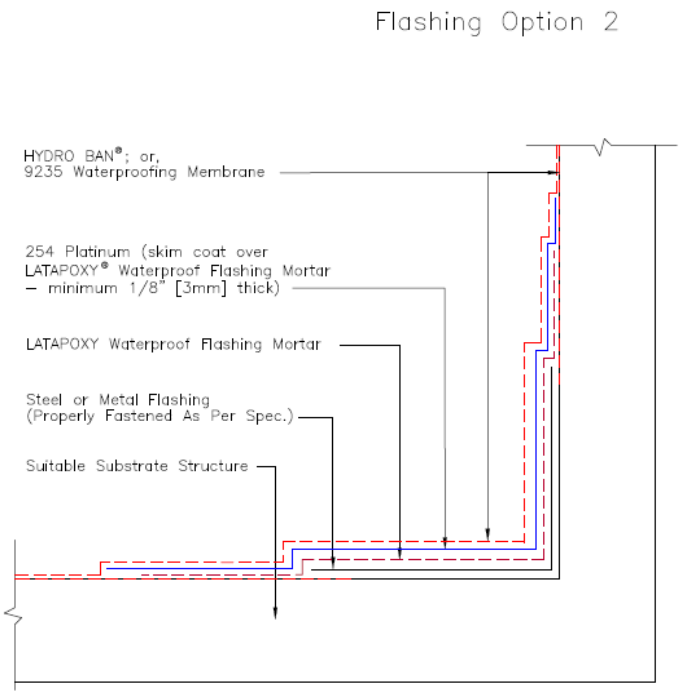
Metal Flashings

1. Install HYDRO BAN or 9235 Waterproofing Membrane onto suitable substrate(s) in accordance with the written installation instructions of LATICRETE International, Inc. (Reference DS 663.5 for HYDRO BAN and DS WPAF.5 for 9235 Waterproofing Membrane).
2. The metal flashing must be clean and free of dirt, dust, oils, oxidation, rust, and all other potentially bond-inhibiting materials. Metal flashings must also be installed so that they are rigid enough not to bend or deflect when exposed to potential loads. NOTE: Mechanical fasteners should not be installed through LATICRETE membranes.
3. Option 1: Apply a skim coat of LATAPOXY® 210 Adhesive onto the metal or steel flashing and extend to 6” (150mm) beyond the flashing onto the approved, properly prepared substrate. Allow the skim coat to cure for a minimum of 24 hours @ 70°F (21°C). After the LATAPOXY 210 Adhesive skim coat is cured install HYDRO BAN or 9235 Waterproofing Membrane over the skim coat and onto the approved substrate.

Flashing Option 1



Option 2: Apply LATAPOXY® Waterproof Flashing Mortar to the clean metal flashing in accordance with the written installation instructions of LATICRETE International (DS 682.0). Allow the LATAPOXY Waterproof Flashing Mortar to cure for 24 hours @ 70°F (21°C). Skim coat the cured LATAPOXY Waterproof Flashing Mortar with 254 Platinum and allow the skim coat to dry for 24 hours @ 70°F (21°C) and overlap it onto the previously installed HYDRO BAN® or 9235 Waterproofing Membrane a minimum of 6" (150mm).



Neoprene Rubber, Bituminous Waterproofing, Asphaltic Waterproofing Membranes, & Liquid Urethane Waterproofing Membranes

Neoprene is a synthetic rubber that is known for being very durable and maintaining its physical characteristics over a wide temperature range. It is not generally recommended as a waterproofing membrane, and is not a suitable material for the direct bond installation of tile or stone using a thin bed mortar.

Bituminous waterproofing materials are comprised of very sticky organic liquids (Bitumen) that are mixed with fillers, such as sand or limestone, and other polymers that help increase the material's rigidity and tear resistance. This matrix is then used to saturate a "base product" such as polyester, fiber glass, rag fiber, or paper. Bituminous membranes are commonly used as primary waterproofing membranes on roof decks, and they are not suitable for the direct bond installation of tile or stone using a thin bed mortar.

Asphaltic waterproofing membranes are also commonly used as primary waterproofing materials on roof decks and terraces. As asphalt is an oil-based material, these materials are not suitable for the direct bond installation of tile or stone using a thin bed mortar.

Liquid applied urethane waterproofing membranes are typically soft rubbery materials that are usually applied in a minimum thickness of 60 mils (1/16") and may be as thick as 90-125 mils (1/10" – 1/8"). Urethane cures slowly, and is relatively soft and tacky after placement. There are also urethane waterproofing membranes that have aggregate broadcast into the urethane while it is curing to help achieve a slip-resistant surface when the membrane will be used as the finished flooring. Neither type of urethane membrane is considered suitable for the direct bond installation of tile or stone using a LATICRETE® thin bed mortar. Please refer to LATICRETE Technical Data Sheet 112 "Ceramic Tile and Stone over Liquid Urethane Waterproofing Membranes" for more information.

IMPORTANT NOTE: ***It is imperative that the contractor contact the manufacturer of the neoprene, bituminous, asphaltic, or urethane product, which will be used over the LATICRETE membrane to check for compatibility issues when used in conjunction with a latex-based waterproofing and/or anti-facture membrane.***

When the need arises for installing tile or stone over any of the above mentioned options or membranes, LATICRETE would first recommend using the Plaza & Deck System for exterior areas over occupied spaces or exterior wood framed decks (Refer to LATICRETE DS 290.0 & ES-F103 at www.laticrete.com/ag). In exterior areas not over occupied space and interior areas, an un-bonded mortar bed may be installed over these types of membranes (Refer to LATICRETE ES-F111 at www.laticrete.com/ag). In instances where the above mentioned membranes will need to overlap HYDRO BAN or 9235 Waterproofing Membrane, the following suggestions may be observed. For the applicable LATICRETE warranty in these instances, refer to LATICRETE DS 230.13.

1. Check with the manufacturer of the neoprene, bituminous, asphaltic, or urethane membrane for compatibility with a latex-based waterproofing membrane.
2. Install HYDRO BAN® or 9235 Waterproofing Membrane on suitable substrates in accordance with the written installation instructions of LATICRETE International (Reference DS 663.5 for HYDRO BAN and DS WPAF.5 for 9235 Waterproofing Membrane)..
3. Allow HYDRO BAN or 9235 Waterproofing Membrane to cure until the last liquid coat is dry to the touch; typically three to four hours at 70° F (21° C).
4. Next, apply a continuous "skim-coat" of LATICRETE® polymer fortified thin bed mortar (e.g. 254 Platinum) that is no less than 1/16" (1.5 mm) thick. Allow this skim-coat to cure for a minimum of 24 hours at 70° F (21° C).
5. Finally, install the neoprene, bitumen, asphaltic, or urethane membrane in accordance with the respective manufacturer's written installation instructions. Follow their requirements for the minimum distance that the seams must overlap.

Chlorinated Polyethylene (CPE) and Polyvinyl Chloride (PVC) Waterproofing Membranes

Note: These types of membranes are most commonly associated as being shower pan liners. They can have a smooth finish, as many of the ones used as shower pan liners often do, or they can have an integral bonding fleece on both sides to help facilitate the bond of thin bed mortars. The smooth surface types are not suitable for the direct application of LATICRETE membranes or thin bed mortars; however, in instances where CPE or PVC membranes with integral bonding fleece will need to overlap HYDRO BAN or 9235 Waterproofing Membrane, the following suggestions may be observed.

1. Install HYDRO BAN or 9235 Waterproofing Membrane on suitable substrates in accordance with the written installation instructions of LATICRETE International (Reference DS 663.5 for HYDRO BAN and DS WPAF.5 for 9235 Waterproofing Membrane).
2. Allow HYDRO BAN or 9235 Waterproofing Membrane to cure until the last liquid coat is dry to the touch. Refer to the LATICRETE Product Data Sheet for 9235 Waterproofing Membrane (DS 236.0) or HYDRO BAN (DS 663.0) for approximate cure times.
3. Next, apply a continuous "skim-coat" of LATICRETE polymer fortified thin bed mortar (e.g. 254 Platinum) that is no less than 1/16" (1.5 mm) thick. Allow this skim-coat to cure for 24 hours at 70° F (21° C).
4. Install the CPE or PVC waterproofing membrane in accordance with the manufacturer's written installation instructions. Follow their requirements for the minimum distance that the seams must overlap.

Do not allow solvents or solvent based products (e.g. primers or seam sealers) to contact a LATICRETE waterproofing membrane.

Cement-Based Waterproofing Membranes

NOTE: These materials typically consist of proprietary cement-based filler powders that are mixed with proprietary acrylic additives and are generally intended to be a finish coating over masonry substrates.

1. Install HYDRO BAN or 9235 Waterproofing Membrane on suitable substrates in accordance with the written installation instructions of LATICRETE International (Reference DS 663.5 for HYDRO BAN and DS WPAF.5 for 9235 Waterproofing Membrane).
2. Allow HYDRO BAN or 9235 Waterproofing Membrane to cure until the last liquid coat is dry to the touch. Refer to the LATICRETE Product Data Sheet for 9235 Waterproofing Membrane (DS 236.0) or HYDRO BAN (DS 663.0) for approximate cure times.
3. Install the cement based waterproofing membrane in accordance with the manufacturer's written installation instructions. Follow their requirements for the minimum distance that the seams must overlap.

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