Concrete curing compounds, sealers and bond breakers
Concrete placement practices often include some form of curing compound or sealer applied to control the amount of moisture loss or the application of a bond breaker or parting compound in tilt-up concrete construction. No curing compounds, sealers or bond breakers (parting compounds) including dissipative types are suitable substrates for any MAPEI epoxy moisture-control membranes, primer and subfloor preparation patch, self-leveling underlayment, adhesive, primer or setting material.

Therefore, surface treatments on concrete substrates must be removed completely using mechanical means only: Sanding, grinding, bead blasting or shotblasting, followed by scraping, sweeping and thorough vacuuming. When grinding or abrading concrete surfaces, always do so in accordance with OSHA’s Respirable Crystalline Silica Standard for General Industry and Maritime, which became effective June 23, 2018. Chemical removal or acid etching is not a suitable replacement for mechanical abrasion in this instance.

Integral and surface-applied silicate moisture treatments and concrete densifiers
Concrete substrates treated with reactive silicate-based materials, either integral or topically applied, are not suitable for any MAPEI epoxy moisture-control membrane, primer, patch, self-leveler, adhesive or setting material. MAPEI does not recognize the claims made for moisture vapor emission control by silicate manufacturers and will consider a concrete slab treated as such as a non-conforming substrate with no moisture vapor control in place. Further, MAPEI does not warrant bond performance of any MAPEI installation or preparation product installed over a silicate-treated concrete substrate*. Additionally, warranties provided by silicate material manufacturers are the sole responsibility of the silicate manufacturer.

* The exception to this rule is with the use of Mapecontact™ MRT and Mapecontact SRT, which are the only two MAPEI products suitable for use over silicate-treated concrete slabs.

What follows are MAPEI’s positions and remedies for concrete substrates with curing compounds, bond breakers, sealers, parting compounds or reactive silicate treatments:
• Any concrete curing or parting agent must be mechanically removed to a clean, dry, porous surface before application of any MAPEI preparation or installation product.
• Any concrete substrate that has been treated with a topically applied silicate solution or densifier must be mechanically abraded to an ICRI CSP of #2 to #3, with the top 1/8” (3 mm) of the substrate removed and porosity verified using the water droplet test per ASTM F3191.
• Any concrete substrate with an integral silicate moisture treatment must be mechanically abraded to an ICRI CSP of #2 to #3, and then covered with a MAPEI epoxy moisture barrier, MAPEI’s Primer X™ and a suitable MAPEI skimcoat or self-leveling underlayment.
• Mapecontact MRT or Mapecontact SRT can be directly applied to silicate-treated concrete slabs.

MAPEI will not review data sheets of these silicate compounds for approval nor provide letters of recommendation for bond or any statement of compatibility. MAPEI will also not observe treated concrete or on-site bond tests for consideration before their mechanical removal.