Chemical Compatibility

Technical Letter 5

GCP's self-adhered underlayments (GRACE ICE & WATER SHIELD® , GRACE ICE & WATER SHIELD® HT, GRACE ULTRA™, GRACE SELECT™, GCP granular underlayments and ROOF DETAIL MEMBRANE™) are chemically compatible with most materials that are normally present in roof-top environments. GCP underlayments are compatible with acids, bases, and salts. They are also compatible with asphalts and dried, fully cured coal tar. Generally, there is no chemical compatibility issue if a material contacts the high-density polyethylene film of the GCP smooth surface self-adhered underlayment. If the contact area is the adhesive component of the underlayment or the granular surface of GCP granular underlayment, there is need to further investigate. As a general rule, the material must be sound, functional and firmly bonded to the substrate.

Roof Deck Materials

GCP's self-adhered underlayments are applied directly to a clean, dry, continuous roof deck. Some suitable deck materials include plywood (including fire treated plywood), oriented strand board (OSB), wood plank, metal, concrete, exterior gypsum board, glass mat surfaced gypsum board, and rigid roof insulation board. Refer to Technical Letters 10, 12, and 13 for additional surface preparation requirements for some of these deck materials. GCP's underlayments are compatible with chromated copper arsenate (CCA), alkaline copper quaternary (ACQ), ammoniacal copper zinc arsenate (ACZA), pressure-treated woods and pressure-treated plywood. GCP's underlayments are not compatible with high concentrations of resin or "pitch" that may bleed out of resin canals in softwoods such as pine, spruce, cedar, larch, or Douglas fir. A ¼" or thicker plywood overlay should be installed over the existing deck when roofing over wood plank decks which are suspected to be of one of the above species, or are of an unknown origin. Tongue and groove roof deck material (regardless of species) that is directly exposed to the interior living space of the building should be overlaid with minimum 1/4" plywood prior to applying the GCP self-adhered underlayment. GCP underlayments should not be installed over unsupported areas of roof deck. Gaps between wood planks are frequently encountered on wood plank decks. These gaps must be repaired prior to installing the GCP underlayment. Alternatively, a plywood overlay may be installed over the wood plank decking to cover the unsupported areas.

Roofing Cements/Sealants

Most roofing cements/sealants are chemically compatible with GCP's underlayments provided that they are applied to the high-density polyethylene film component of the underlayment. If the roofing cement/sealant is to contact the adhesive side of the underlayment, ensure it is fully cured prior to applying the underlayment, and avoid cements/sealants high in solvent.

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

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