

## Storage, Shelf Life and Conditioning of LATICRETE<sup>®</sup>, LATAPOXY<sup>®</sup>, STONETECH<sup>®</sup> & SPARTACOTE<sup>®</sup> Products

## TDS 132

LATEX BASED MEMBRANES AND TEMPERATURE – LATICRETE<sup>®</sup> latex based membrane materials (e.g. 9235 Waterproofing Membrane, HYDRO BAN<sup>®</sup> XP or HYDRO BAN) should be stored at temperatures between 45° and 90°F (7° and 32°C) but should be tempered to reach a temperature of  $\geq$ 70°F (21°C) for a minimum of 12 hours prior to use. This will ensure the proper consistency of the membrane liquid for installation. 9235 Waterproofing Membrane requires the surface temperature of the substrate to be between 45° and 90°F (7° and 32°C) during installation and for 24 hours after installation. HYDRO BAN XP requires the surface temperature of the substrate to be between 32° and 90°F (0° and 32°C) during installation and for 24 hours after installation. HYDRO BAN requires the surface temperature of the substrate to be between 50° and 90°F (10° and 32°C) during installation and for 24 hours after installation and for 24 hours after installation. HYDRO BAN requires the surface temperature of the substrate to be between 50° and 90°F (10° and 32°C) during installation. HYDRO BAN requires the surface temperature of the substrate to be between 50° and 90°F (10° and 32°C) during installation and for 24 hours after installation. HYDRO BAN requires the surface temperature of the substrate to be between 50° and 90°F (10° and 32°C) during installation and for 24 hours after installation.

<u>CEMENT BASED MATERIALS AND TEMPERATURE</u> – LATICRETE cement based products (e.g. 3701 Fortified Mortar, NXT<sup>®</sup> Level Plus, 254 Platinum, 317 Mortar, PERMACOLOR<sup>®</sup> Select<sup>^</sup>, etc...) packaged in bags or cartons are not affected by high or low temperatures. These products can be shipped and stored at temperatures above 100°F (38°C) and below freezing without affecting the product. These products should be brought to and installed onto substrates that have a surface temperature range between 40° and 90°F (4° and 32°C). Please note that low temperatures will extend cure time.

<u>LATEX LIQUIDS</u> – LATICRETE latex additives (e.g. 333 Super Flexible Additive, 3701 Mortar Admix, etc...) should be stored off of the ground at temperatures  $>32^{\circ}$  and  $<110^{\circ}$ F (0° and 43°C). Protect LATICRETE latex additives from freezing whenever possible. If material should freeze then place in a heated area and allow it to thaw completely and stir well before using. NOTE: Follow the guidelines above for cement-based materials regarding surface temperature requirements.

<u>MASTIC PRODUCTS</u> –15 Premium Mastic should be stored at temperatures >32° and <110°F (0° and 43°C). Installation of tile or stone using mastic should not be done when the surface or air temperatures are below 45°F (7°C) or above 90°F (32°C). Installation of tile or stone at temperatures between 45° and 59°F (7° and 15°C) requires an additional 24 – 48 hours of cure time prior to grouting.

<u>POLYASPARTIC RESINS</u> – SPARTACOTE<sup>®</sup> polyaspartic resins should be stored off the ground at temperatures between 40° and 75°F (4° and 24°C). SPARTACOTE FLEX SB and can be installed on suitable surfaces with installation temperatures between -30° and 90°F (-34C and 32°C) while SPARTACOTE FLEX PURE & SPARTACOTE FLEX XPL can be installed on suitable surfaces between 25° and 90°F (-4° and 32°C).

<u>URETHANE CEMENT</u> – SPARTACOTE<sup>®</sup> Urethane Cement materials (e.g. SPARTACOTE Urethane Cement ATS, SPARTACOTE Urethane Cement SL, SPARTACOTE Urethane Cement Topcoat, SPARTACOTE Urethane Cement Cove Base) should be stored off the ground in a cool dry area. During application surface temperatures should fall between 40° and 85°F (4° and 29°C) Please note that low temperatures will extend cure time.

<u>EPOXY RESINS AND TEMPERATURE</u> - The storage and working temperatures of epoxy liquids is very important to the working properties of the epoxy. The ideal storage and working temperature of the liquids when mixing should be between  $60^{\circ}$  to  $90^{\circ}$ F ( $16^{\circ}$  to  $32^{\circ}$ C) unless otherwise indicated. At these temperatures the resins are liquid, easy to mix and have good working properties.

<u>EPOXY RESINS AND COLD TEMPERATURES</u> – When the temperatures fall below  $60^{\circ}F(16^{\circ}C)$  epoxy resins become thick, difficult to mix, and they cure very slowly. LATAPOXY<sup>®</sup> SP-100 should not be mixed or applied if the temperature is below  $60^{\circ}F(16^{\circ}C)$ . SPECTRALOCK<sup>®</sup> PRO Premium Grout and SPECTRALOCK PRO Grout can be installed at temperatures down to a surface temperature of  $40^{\circ}F(5^{\circ}C)$ , while SPARTACOTE<sup>TM</sup> Epoxy resins minimum installation

temperature should be no lower than 50°F (10°C). In all cases, lower temperature installation would result in an extended cure time.

SPECTRALOCK 2000 IG is able to cure faster and at lower temperatures than other epoxy materials. This means that SPECTRALOCK 2000 IG can be installed at temperatures as low as  $40^{\circ}$ F (5°C). Working time and cure time will be extended.

If installation of epoxies must occur in cooler temperatures than it is suggested, it may be necessary to store the epoxy liquids at room temperature  $70^{\circ}F(21^{\circ}C)$  to bring them to an easy, workable condition. Another method is to immerse the material in warm water ( $110^{\circ}F[43^{\circ}C]$ ) for one hour prior to mixing. Keeping the surface temperature of the substrate warm will also help during the application of the epoxy material.

<u>EPOXY RESINS AND HOT TEMPERATURES</u> – When the temperature rises above  $90^{\circ}F(32^{\circ}C)$  the curing of epoxy is greatly accelerated. Pot life and working properties will be shortened (see chart below). Hot environments should be cooled when the air or substrate temperature is above  $90^{\circ}F(32^{\circ}C)$ .

If installation must occur in hotter temperatures, then it is suggested to:

- 1. Store the resins at room temperature 70°F (21°C) for 24 hours or place them in a cold area (e.g. refrigerator or cooler) if available.
- 2. DO NOT APPLY on exterior areas which are exposed to the sun and/or hot to the touch (>90°F/32°C). Epoxies can flash set and be extremely difficult to remove from the surface. Blisters and bubbles can also form in epoxy grouts when temperatures are high.
- 3. Mix the resin and hardener together and then quickly add and mix the SPECTRALOCK<sup>®</sup> Part C powder to the liquids and mix. Immediately remove the epoxy from the bucket and pour out of the container and onto the working surface (horizontal) or a plastic sheet. *Keeping the epoxy in the mixing container will cause the material to retain heat and cure at an even more accelerated rate.*

LATICRETE International, Inc. manufactures a wide variety of tile installation materials. Although they are easy to install they do require certain temperature ranges whether you're installing or just storing the LATICRETE<sup>®</sup> products. We have created a list of many LATICRETE products and their temperature requirements so that it may be helpful to you when working with and storing the product.

NOTE: some cementitious materials have different shelf life depending on packaging and/or if designed as *Rapid* version.

Product	Working Properties	Shelf Life
LATICRETE <sup>®</sup> Latex Membranes 9235 Waterproofing Membrane HYDRO BAN <sup>®</sup> HYDRO BAN XP HYDRO BAN Quick Cure HYDRO BARRIER <sup>™</sup> Plus Blue 92 Anti-Fracture Membrane FRACTURE BAN SC	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and 110°F (43°C).
HYDRO BAN <sup>®</sup> Cementitious Waterproofing Membrane	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and 110°F (43°C).
<ul> <li>LATICRETE Cement Products</li> <li>All Box/Carton packaged grouts</li> <li>All Non-Rapid Bag packaged mortars/thinsets</li> <li>All Bag packaged grouts</li> </ul>	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers are guaranteed to be of first quality for two (2) years if stored off the ground in a warm, dry area.
<ul> <li>LATICRETE Cement Products</li> <li>All Rapid setting mortars/thinsets, including Quick Cure Mortar Bed</li> <li>All Self-levelers underlayments, including Overlays.</li> </ul>	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers are guaranteed to be of first quality for one (1) year if stored off the ground in a warm, dry area.
<ul> <li>LATICRETE Premium Latex Additives/Admix</li> <li>3701 Mortar Admix.</li> <li>333 Super Flexible Additive</li> <li>NXT® Embossing Admix</li> </ul>	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers are guaranteed to be of first quality for five (5) years if stored off the ground at temperatures >32°F (0°C) and <110°F (43°C).

Product	Working Properties	Shelf Life
Primer Plus	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored at temperatures >32° (0°C) and <95°F (35°C).
PRIME-N-BOND <sup>TM</sup>	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored at temperatures >32° (0°C) and <95°F (35°C).
125 Tri-Max Adhesive	40 min. open time at 70°F (21°C) >2 hours pot life at 70°F (21°C) 5 hours time to foot traffic at 70°F (21°C)	Factory sealed containers of this product are guaranteed to be of first quality for two (2) year if stored off the ground in a dry area. <b>Product must</b> <b>not be allowed to freeze prior to use and full cure</b> <b>time.</b>
15 Premium Mastic	20-30 minute open time	Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored at temperatures $>32^\circ$ (0°C) and $<110^\circ$ F (43°C).
SPECTRALOCK <sup>®</sup> PRO Premium Grout* SPECTRALOCK PRO Premium Translucent Grout* SPECTRALOCK PRO Grout*	30 min. working time at 95° F (35°C) 80 min. working time at 70° F(21°C) 120 min. working time at 40° F (4°C) (substrate temperatures)	Liquids - 2 years if stored at temperatures >32°F (0°C) and <95°F (35°C). Part C Powders - Unlimited shelf life
SPECTRALOCK 1	6 hour time to light traffic at 70°F (21° C) 24 hour time to heavy traffic at 70°F (21° C) 28 Day full cure at 70°F (21° C) (substrate temperature)	Factory sealed containers of this product are guaranteed to be of first quality for 18 Months if stored at temperatures >32 °F (0° C) and 95° F (35° C). Previously opened container can be used for up to 6 months if the bucket tightly closed when not in use.
Ready-to-use	24 hour time to light foot traffic at 90°F (32° C) 72 hour time to heavy foot traffic at 70°F (21° C) 28 Days to full cure at 70°F (21° C) (substrate temperature)	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and <95°F (35°C)
LATAPOXY <sup>®</sup> 300 Adhesive	Pot life 45 min. at 70°F (21°C) Do not install when surface temperature is below 60°F (16°C) or above 90°F (32°C).	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at $>32^{\circ}F(0^{\circ}C)$ to $<110^{\circ}F(43^{\circ}C)$ .
LATAPOXY 310 Stone Adhesive	100 min. pot life at 40° F (4° C). Set time is 10 hrs. 45 min. pot life at 70° F (21°). Set time is 5-6 hrs. 25 min. pot life at 90° F (32° C). Set time is 2.5-3 hrs. Surface temperature for application: 50° F (10°C) to 95° F (35°C).	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >32°F (0° C) to <110°F (43°C).
LATAPOXY 310 Rapid Stone Adhesive	Pot life @ 70° F (21°C) is 3-5 min. Set time@70° F (21°) is 5-8 min. Surface temperature for application: 50° F (10°C) to 95° F (35°C).	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >32° F (0° C) to <110° F (43°).
LATAPOXY Waterproof Flashing Mortar	Allows flood testing in 24hrs at 70° F(21°C) Surface temperature must be 45-90° F (7-32°C).	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >32° F (0° C) to <110° F (43°C).
SPARTACOTE® Epoxy Resins	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >40°F (4°C) and <95°F (35°C)
SPARTACOTE Polyaspartic Resins	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers are guaranteed to be of first quality for two (2) years if stored off the ground at temperatures >40°F (4°C) and <95°F (35°C).
SPARTACOTE Decorative Media         •       SPARTACOTE Metallic Pigment         •       SPARTACOTE Blended Chip         •       SPARTACOTE Blended Quartz         •       SPARTACOTE Polyaspartic Pigment         •       SPARTACOTE Epoxy Pigment	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers are guaranteed to be of first quality for one (1) year if stored off the ground at temperatures >40°F (4°C) and <75°F (24°C). SPARTACOTE Blended Chip, Blended Quartz, & Metallic Pigment- Unlimited shelf life
<ul> <li>SPARTACOTE Traction Additive</li> <li>SPARTACOTE Grip</li> <li>SPARTACOTE DIAMOND TOPP</li> </ul>	See appropriate product data sheets for specific working properties and temperatures.	Unlimited Shelf Life
<ul> <li>SPARTACOTE Urethane Cement</li> <li>Urethane Resins</li> <li>Cementitious Powders (Paper Bags)</li> </ul>	Pot Life 20 mins. at 77°F (25°C) Do not install when surface temperatures is below 40°F (4°C) or above 85°F (29°C)	Factory sealed containers of the following products are guaranteed to be of first quality if stored off the ground in a clean, dry area. Urethane Cement Liquids (Parts A & B): 1 Year. Urethane Cement Powders: 6 months. Urethane Cement Pigments: N/A
NXT Vapor Reduction Coating DRYTEK Moisture Vapor Barrier	Pot Life: Pour the fully mixed material onto the substrate immediately after mixing. Surface temperature must be between 50° F (10°C) and 90° F (32°C) during installation and for 24 hours after installation.	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >32° F (>0° C) to <110° F (<43°C).
SPECTRALOCK <sup>®</sup> 2000 IG	Working time is 80 min. at 70° F(21°C) Surface temperature must be between 45° F (7°C) and 90° F (32°C).	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years. Part C Powders – Unlimited shelf life

Product	Working Properties	Shelf Life
LATASIL <sup>TM</sup>	7 – 10 minute tooling time 17 minute tack free time at 77°F (25°C) and 50% RH	When stored in the original, unopened containers at or below 90°F (32°C), this product has a 1 year shelf life.
LATASIL 9118 Primer	30 minute cure time at 70°F (21°C)	When stored in original, unopened containers at or below 90°F (32°C), shelf life is 6 months from date of manufacture. Container should be kept tightly sealed when not in use.
Premium Acrylic Caulk	20 minute open time 48 hour set time 2 week full cure time	Factory sealed containers of this product are guaranteed to be of first quality for (2) years if stored at >32° F (>0° C) to <110° F (<43°C).
STONETECH <sup>®</sup> Sealers, Enhancers & Cleaners	See appropriate product data sheets for specific working properties and temperatures.	Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >50°F (10°C) and <90°F (32°C)

## Fully Cured, Installed, In-Service Temperature Exposure

Product	Constant Temp	Intermittent Temp
LATICRETE Latex Membranes	-20° to 280°F (-28 to 138°C)	
HYDRO BAN <sup>®</sup> Sheet Membrane	-22° to 194°F (-30 to 90°C)	
LATICRETE Cement Products	350°F (177°C) Maximum	
15 Premium Mastic	140°F (60°C) Maximum	
HYDRO BAN <sup>®</sup> BOARD	-58° to 158°F (-50° to 70°C)	
SPECTRALOCK 2000 IG	160° F (71°C)	360° F (182°C)
LATAPOXY 310 Stone Adhesive	150° F (66°C)	360° F (182°C)
LATAPOXY 310 Rapid Stone Adhesive	125° F (52°C)	360° F (182°C)
LATAPOXY Waterproof Flashing Mortar	125° F (52°C)	360° F (182°C)
NXT Vapor Reduction Coating	160° F (71°C)	360° F (182°C)
SPARTACOTE Polyaspartic Resins	185° F (85°C)	300° F (149°C)
SPARTACOTE Epoxy Resins	160° F (71°C)	175° F (79°C)
SPARTACOTE Urethane Resins	150° F (65°C)	175° F (79°C)
SPARTACOTE WB EPOXY PRIMER	150° F (65°C)	360° F (182°C)
SPARTACOTE Urethane Cement System	150° F (65°C)	250° F (121°C)
LATAPOXY 300 Adhesive	160° F (71°C)	360° F (182°C)
LATAPOXY SP-100	150° F (65°C)	250° F (121°C)
SPECTRALOCK PRO Premium Grout	150° F (65°C)	250° F (121°C)
SPECTRALOCK PRO Grout	150° F (65°C)	250° F (121°C)
SPECTRALOCK 1	140°F (60°C) Maximum	
LATASIL	-40° to 350°F (-40 to 177°C)	
Premium Acrylic Caulk	0° to 180°F (-18° to 82°C) - Sanded -20° to 180° (-29° to 82°C) - Unsanded	
STONETECH® and Stone Care Products	Limited by tile or stone installation materials	

For more information on tile or stone installations in cold weather, please refer to LATICRETE TDS 175 "Cold Weather and LATICRETE"; or, for installation of tile or stone in hot weather please refer to LATICRETE TDS 176 "Hot Weather and LATICRETE."

\* United States Patent No.: 6,881,768 (and other Patents)

^ United States Invention Patent No.: 6,784,229 (and other Patents)

Technical Data Sheets are subject to change without notice. For latest revision, check our website at <u>www.laticrete.com</u> TDS 132.doc R 04 January 2024



LATICRETE INTERNATIONAL, INC. - 1 LATICRETE Park North - Bethany, CT 06524-3423 USA 800.243.4788 - support@laticrete.com - www.laticrete.com

©2013 LATICRETE INTERNATIONAL, INC. All trademarks shown are the intellectual properties of their respective owners.