



INTEGRA

ALL-IN-ONE THINSET AND GROUT FOR MOSAICS AND GLASS TILE INSTALLATIONS

- All-In-One thinset and grout
- Use on walls and floors
- Nonabrasive
- Makes mosaics and glass tile installations fast
- Residential and commercial projects
- Only requires addition of water



4. Technical Data

Applicable Standards: Integra meets or exceeds industry requirements ANSI A118.4 for Latex Portland Cement Mortar. Follow ANSI A108.5 for installation. ANSI A118.6 for Portland Cement Grout and ANSI A118.7 Polymer Modified Cement Grout. Follow the TCA Handbook and ANSI A108.10 Installation of Grout in Tile work. ANSI A108.14 Installation of paper-faced glass mosaic tile, ANSI A108.15 -2011 Alternate Method: Installation of paper-faced glass mosaic tile, ANSI A108.16 – 2011 Installation of paper-faced, back-mounted, edge-mounted, or clear film face-mounted glass mosaic tile.

1. Product Name

Integra

2. Manufacturer

Parex USA, Inc.

2150 Eastridge Ave, Riverside, CA 92507

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3. Product Description

Basic Use

Integra is a nonabrasive all-in-one adhesive and grout for glass tile installations on walls and floors. Dual-purpose, uniform-color Integra was purposely developed for installation of mosaics and glass tile to eliminate thinset color bleed-through.

PROPERTIES

ANSI 118.4	ANSI Requirements	Integra Grout Results
Flexural Strength	350 psi	>1100 psi
Tensile Strength, 28 day	350 psi	> 390 psi
Compressive Strength, 28 day	3500 psi	> 390 psi
Quarry Tile, 12-week shear	> 150 psi	> 380 psi
LEED v3 NC VOC	EQ Credit 4.1	Integra Mortar Results
VOC	< 65 g/l	0

Packaging

25-lb. (11.34-kg) bag; 96 bags per pallet | Colors: 8 standard colors

Shelf Life

Reference Parex USA Expiration Date of Products Technical Bulletin.



5. Installation

Surface Preparation

All surfaces must be between 40°F (4°C) to 95°F (35°C) and structurally sound (deflection not to exceed $\frac{1}{360}$ of the span), dry, clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminants that inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108 AN-2 "General Requirements for Sub-surfaces". All substrates should be plumb and true; surface deviation should not exceed $\frac{1}{4}$ " in 10'. Patching, leveling or areas requiring a mortar bed should be prepared using Merkrete's Underlayment. Movement (Expansion) joints should be provided to comply with TCA method EJ 171. Caution: When considering the installation of glass mosaics, it is important to follow the glass tile manufacturer's recommendations.

Substrates

Cement Substrates: All concrete substrates should be cured a minimum of 28 days. Smooth, steel-troweled floors should be roughed up using mechanical chipping, scraping or shot blasting. Dampen porous or dry concrete before installation of tile. Do not leave puddles or standing water.

Cement Backer Board: Follow cement board manufacturer's instructions.

Mixing

In a clean container, add approximately 4 pints (1.89 l) of cool, clean water per 25-lb. (11.34-kg) bag of Integra. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Allow mortar to slake for approximately 15 minutes. Remix before using without adding more water or powder. Mortar consistency shall be such that when applied with the recommended notched trowel to the substrate, the ridges formed in the mortar do not flow or slump. During use, stir mortar mix occasionally. Do not temper with additional water. Do not add latex liquid to Integra mortar.

Application

Apply mortar to the substrate with the flat side of the trowel using enough pressure to firmly work into the surface. With a notched trowel, immediately follow with a heavier coat of material using enough mortar to provide 100% coverage to the back of the tile. Do not spread more mortar than can be covered in 20 minutes or before the mortar skins over. It is advised that during the installation, remove a tile to ensure the mortar has not skinned over and check the tile and substrate mortar coverage. Comb the mortar using an appropriate notched trowel in one direction, using the back of the trowel. Flatten any mortar notches before placing the mosaic glass tile. Place tiles in mortar; beat in to ensure proper coverage. Do not adjust tiles set in mortar after 15 minutes.

Grout Installation

Surface Preparation: Glass tile must be firmly attached to a sound substrate. Grout joints should be free of all loose debris and contaminants. Caution should be used on tile, glass tile, marble, or stone that can be scratched. Follow tile manufacturer's recommendations. Test a small area prior to use. If recommended by manufacturer, or if there is a concern about scratching the finish material, use Merkrete's Duracolor nonsanded grout.

Mixing

To minimize color variation when using multiple containers of the same color grout with different batch numbers, dry-blend the powder before mixing with water. Combine approximately 4½ pints (2.13 l) of cool, clean water per 25-lb. (11.34-kg) bag of Integra with a margin trowel or a low-speed mixer (less than 300 rpm) to a lump-free, paste-like consistency. Let stand 10 minutes; remix before use. Periodic mixing during application keeps the grout workable but do not add more water or additive once mixed. Maintaining a consistent mixing ratio between batches helps maintain color shade uniformity. Discard grout when it becomes too stiff to work.

Application

Installation shall conform to the current method of ANSI A108.10. Holding a rubber grout float at a 45° angle, force grout diagonally into joints ensuring joints are completely filled. Remove excess grout using edge of float held at a 90° angle. Cleanup can begin as soon as the grout becomes firm enough to be only slightly indented when pushed. Use as little water as possible for grout cleanup. Excess water will cause variation in color and may cause shrinkage, cracks or pinholes. Smooth and level joints in a circular motion. Remove excess grout from tile with a damp small-pore grout sponge. It is best to change cleaning water and rinse sponge frequently. Using clean water and sponge will enhance color uniformity. Remove or buff grout haze from tile surface with a soft, dry cloth.

Curing

Protect fresh grout from damage for a minimum of 72 hours. Like other Portland cement products, Merkrete Integra will cure in approximately 28 days.

Limitations

Do not use Integra below 50° F (10° C) or above 95° F (35° C). Use caution to not allow mortar to freeze for the first 72 hours. Do not soak tiles prior to installation. Integra must not be applied over asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, gypsum mortar beds or other unstable substrates. For installations that will be continually wet like swimming pools, fountains and gang showers, the completed installation should be cured a minimum of 14 days and allowed to dry before exposure to water. For white or light-colored marbles and transparent glass mosaics, use Integra D11 White mortar. Some dimensional stone tile like resin-backed, black, green and red marbles may warp when installed with water-based setting materials. These water-sensitive stone tiles should be installed with Merkrete Pro Epoxy. Exterior applications should not be performed if rain is expected within 24 hours. Caution should be used on tile, glass mosaics, marble, or stone that can be scratched, stained, or damaged when grouted with pigmented sanded grouts. Follow tile manufacturer's recommendations. Test a small area prior to use. Tile with high absorption, surface porosity, rough, textured surfaces, and/or certain types of porcelain may require sealing prior to grouting to prevent staining. Efflorescence, a crystalline deposit that sometimes appears in or on cement grout as a whitish powder or crust, can occur with any Portland cement based product. If it occurs, remove with sulfamic acid cleaner or ANSI-approved cleaner. Color variations can occur in Portland cement products including grout, differing tile types, tile porosity, jobsite conditions, application and cleaning techniques. Color variations can be minimized by following directions



and using as little water as possible for cleanup. For use of Integra over other substrates or in situations not mentioned in these instructions, contact Merkrete Technical Services.

Coverage

RECOMMENDED NOTCH SIZE	
1/4" x 1/4" 6 mm x 6 mm	1/4" x 3/8" 6 mm x 10 mm
Ceramics	Quarry Tile, Rough Stone
APPROXIMATE COVERAGES - 25 LB.	
32 – 35 sq. ft. 3.0 – 33.4 m ²	27 – 32 sq. ft. 2.5 – 33.0 m ²

How many square feet can I grout per 25-lb. bag?

TILE SIZE	JOINT WIDTH			
	1/8"	1/4"	3/8"	1/2"
2" x 2" x 1/4"	93	50	36	29
4" x 4" x 3/8"	119	61	43	33
4" x 8" x 3/8"	156	81	56	43
6" x 6" x 3/8"	179	89	61	47
6" x 8" x 3/4"	100	51	35	27
8" x 8" x 3/8"	227	119	81	61
10" x 10" x 3/8"	278	147	100	76
12" x 12" x 3/8"	357	179	119	89
15" x 15" x 3/8"	417	208	147	109
16" x 16" x 3/8"	500	250	167	132
18" x 18" x 3/8"	625	278	192	147
20" x 20" x 3/8"	625	313	208	167

For more information, visit our online grout calculator at www.merkrete.com/tools/grout_calculator.shtml

6. Availability

Merkrete Integra is available at leading tile houses and construction distributors. Contact Merkrete or visit our website for the name of the nearest dealer at www.merkrete.com.

7. Warranty

5-year, 10-year and Limited Lifetime warranties are available. Contact Merkrete Technical Services or visit our website for specific warranty information. Merkrete warrants that this product meets applicable ANSI standards in force at the time of manufacture.

8. Maintenance

None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. Technical Services

Merkrete Systems maintains technical field representatives available throughout the country. Call Technical Services at 800-226-2424 for the nearest representative.

10. Literature

For the most up-to-date technical information (details, submittals, SDSs or data sheets), refer to our websites at www.parexusa.com or www.merkrete.com.



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