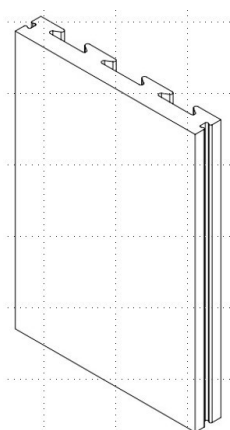


## SELECTION & SPECIFICATION DATA

<b>Type</b>	Structural Glazed Tile
<b>Description</b>	Pennchem Tile are glazed, vitrified ceramic tile used to construct and line chemical process equipment. Commonly called structural glazed tile or liner plates, these non-stick, ribbed tiles become an integral element of the structure once concrete is placed behind them. Pennchem Tile may also be used against steel vessels using a set-and-back-pour installation method. Available in 8.75-inch (222 mm) x 11.75-inch (298 mm) modules.



<b>Uses</b>	<ul style="list-style-type: none"> <li>• Pulp chests</li> <li>• HD Towers</li> <li>• Brown stock chests</li> <li>• Wire pits</li> <li>• Couch pits</li> <li>• Screen chests</li> <li>• White water chests</li> <li>• Thickeners and clarifiers</li> <li>• Scrubbers</li> <li>• Flue gas desulfurization (FGD) absorber towers</li> </ul>
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<b>Features</b>	<ul style="list-style-type: none"> <li>• Excellent dimensional tolerance</li> <li>• Easy to cut in the field</li> <li>• Made in USA</li> <li>• Integrally extruded ribs form robust anchor to concrete</li> <li>• Design reduces tile stress points</li> <li>• Factory applied, durable glaze finish</li> <li>• Nonstick surface</li> </ul>
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<b>Limitations</b>	<ul style="list-style-type: none"> <li>• Cut to fit around inlets, outlets, and nozzles</li> <li>• Not for use beyond its chemical and thermal limits</li> </ul>
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## INSTALLATION GUIDANCE

<b>Reference Specifications</b>	For commonly used chemical-resistant side and head joint setting or repointing mortar, consult CE-250 Pennchem™ Mortar product data sheet.
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Pennchem Tile are commonly installed with Portland cement concrete. For polymer concrete or grout backfill, consult the following product data sheets:

- CE-284 Acrocast™ Polymer Concrete
- CE-292 Acrocast XF Concrete
- CE-240 Acrocast Grout
- CE-268 Acrocast XF Grout

<b>Installation Conditions</b>	Tile bonding surfaces should be clean and dry during installation. Prevent condensation on tile surfaces by acclimating them to the ambient conditions at the work site. Break open pallets to speed this process. For allowable ambient and material temperature conditions, consult mortar, concrete, and grout installation instructions.
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## SAFETY

<b>Safety</b>	Mixes and applications of components used with this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and safety data sheets before using.
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<b>Ventilation</b>	Provide thorough air circulation during and after installation until the material has cured when used in enclosed areas.
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## PACKAGING, ESTIMATING & HANDLING

Pennchem Tile are often referred to as a 9 x 12-inch modules. Actual tile dimensions are 8.75 x 11.75 x 1.25-inch thick (222 x 298 x 32 mm).

Code	Description	Package
30801	Pennchem Tile Palomino	Each (1 pc)

30804	Pennchem Tile Rustic Orange	Each (1 pc)
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Tile are packaged 220 tile per pallet, 11 tile per row (4-4-3) and 20 rows per pallet on a 33" x 33" pallet.

Tile are sold in full pallet lots only.

A full pallet weighs 1854 lb (841 kg) including pallet.

Mortars, Polymer Concrete, and Structural Grout components used to install Pennchem Tiles are packaged as outlined on individual data sheets. Consult ErgonArmor for details.

### **Storage & Shelf Life**

Maintain products in original packaging and sealed until ready for use. Tile pieces have an indefinite shelf life. Cardboard dividers or cartons used to store or package Pennchem Tile may degrade when wet. Keep product dry.

## TYPICAL PHYSICAL PROPERTIES

Color	Palomino, Rustic Orange. Other colors available, call
Shape availability	Rectangular
Surface texture	Smooth, factory applied glaze
Thickness	Face thickness: 0.75-inch (19 mm) Thickness at lugs: 1.25-inch (32 mm)
Dimension tolerance, ASTM C1088	< 3%
Bulk density, ASTM 279	>134 lb/ft <sup>3</sup> (2,144 kg/m <sup>3</sup> )
Weight per piece	8.2 lb (3.7 kg)
Compressive strength, ASTM C67/C67M	>22,000 psi (151.7 MPa)
Modulus of rupture	>1,900 psi (13.1 MPa)
Water absorption, ASTM C67/67M	
24-hour cold water	4.5%
5-hour boiling water	5.8%
Hardness (Moh scale)	>7

**Rev 07/2025r2**

### **TERMS AND CONDITIONS OF SALE**

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