

Wausau Tile, Inc. Site Furnishings & Precast Concrete Warranty, Care & Maintenance, Precast Concrete Installation and Specification

Table of Contents:

Warranty:	2
Precast Concrete Care & Maintenance:	3 - 4
Plastic / Metal Care & Maintenance:	5
Corian [®] / Hardwood Care & Maintenance:	6 - 7
Precast Concrete Installation Suggestions:	8
Precast Concrete Specification – Section 3400:	9 – 11

Precast Concrete & Site Furnishings Limited Warranty

Precast Concrete Products:

For a period of two (2) years when the customer has received their product, Wausau Tile, Inc. warrants its concrete products against defects in workmanship and materials per industry standards. This warranty does not cover the above products for cracking and faulting caused by settling due to an improper base; nor does it cover damage caused by impact, vandalism or natural disaster.

Plastic Products:

For a period of one (1) year when the customer has received their product, Wausau Tile, Inc. warrants its plastic products against defects in workmanship and materials per industry standards.

Metal Products:

For a period of five (5) years when the customer has received their product, seller warrants the under-support to be free from defects in material and workmanship.

Corian® / Hardwood Products:

No warranty offered for exterior usage.

All warranty periods shall begin when the customer has received their product. The warranty does not cover any damage in transit, product misuse, intentional acts, vandalism, acts of God or improper installation. No person, except seller's president, may alter this warranty.

This warranty is in lieu of all other warranties, express or implied including, but not limited to, warranties of merchantability or fitness for particular purpose. Upon proper presentation and verification of a valid claim within the applicable warranty period seller, at its option, shall repair or replace the defective part or parts F.O.B. Wausau, Wisconsin, excluding site labor costs. This remedy is the buyer's sole and exclusive remedy. In no event shall seller be liable for any indirect, special, incidental or consequential damages.

The product(s) must be maintained as directed on the following pages, and all invoices must be paid in full or the warranty will be considered void.

Wausau Tile, Inc. will warrant any defects in surface, color and/or texture caused by poor workmanship in manufacturing. Wausau Tile, Inc.'s obligation over the period of the warranty is limited to the owner's original purchase price of product only as manufactured by Wausau Tile, Inc. **THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.**

This warranty is validated only when Wausau Tile, Inc. is furnished with a copy of the owner's original invoice or delivery receipt.

Concrete Site Furnishings and Precast Concrete Care & Maintenance Procedures

Wausau Tile's concrete site furnishings and precast concrete items can be easily maintained to preserve the attractive appearance and extend the life of the product. If you have any further questions regarding maintenance or any other subject, please contact us at 800-388- 8728. When using these procedures, please follow the product manufacturer's instructions regarding the use of any equipment or cleaning materials described here.

Annual Maintenance

Power sweep, then pressure wash total precast surface. Spot clean any stained areas using procedures described below.

To clean marks from concrete products, a simple off-the-shelf cleaner will handle most cases. These types of cleaners are often classified as neutral, non-aggressive cleaners, and may require effort to remove some of the tougher marks.

Examples of off-the-shelf cleaners: Citrus cleaner, Simple Green

In extreme cases, paint thinner or other more aggressive types of cleaners can be used.

Note: Always start with the most neutral cleaner and work your way toward the more aggressive cleaners. The two provided examples are not recommendations of one product over another.

Remember, this is a concrete product and is built to withstand aggressive cleaning. However, the more aggressive the cleaner, the more risk is involved for the person doing the cleaning. Strict adherence to all product warnings is suggested.

Check the precast for broken and chipped pieces. Some pieces may be patched. Notify Wausau Tile of damaged piece. Wausau Tile will then assemble and send a patch kit with repair instructions. Please contact Wausau Tile before repairing, and review patching procedures.

In all cases after cleaning and patching, it is recommended that the item be sealed or restained and sealed. This will help protect the product from the environment. Contact Wausau Tile for additional instruction or to obtain sealer and stain.

Periodically, the sealer/stain must be reapplied. The frequency between applications is based on time and use. As specified in our warranty, an annual application is recommended. In cases of extreme use, the best time for application is when the appearance of the product is showing wear or is appearing dull.

Weather Maintenance of Concrete

Please be sure to use plastic, rubber or nylon tip equipment; this will help prevent scratches on the concrete.

De-icing salts can damage concrete, causing them to scale or break up. These chemicals should be used sparingly and with caution on our concrete products. No salt-based products should be used. Calcium magnesium acetate and calcium chloride cause the least damage to concrete.

De-icers should be used only when necessary to help loosen snow and ice, and make removal easier. Never over-apply de-icing products, and remove slush before it has the opportunity to refreeze. Mix the de-icers with sand to increase their effectiveness and reduce overall use. Always read and follow label directions when applying de-icing materials.

Plastic and Metal Site Furnishings Care & Maintenance Procedures

Wausau Tile's plastic and metal site furnishing items can be easily maintained to preserve the attractive appearance and extend the life of the product. If you have any further questions regarding maintenance or any other subject, please contact us at 800-388-8728. When using these procedures, please follow the product manufacturer's instructions regarding the use of any equipment or cleaning materials described here.

Annual Maintenance – Plastic Products

Clean as needed with a mild detergent and water. These products may be treated with over-the-counter plastic cleaners/conditioners such as "Armor-All" for added luster if desired. The frequency of applications is based on environment and personal preference. All Wausau Tile plastic parts are produced using the best UV-stabilized plastics available on the market, and the use of a spray-on protectant is a personal choice. All paste-type waxes are not recommended.

Do not use grit or bleach-based cleaners, as these types of products will damage the plastic.

Annual Maintenance – Metal Products

For aluminum parts, again, soap and water is the most effective method. In instances of scratching, touch-up with matching enamel paint will guard against oxidation. In extreme cases, all aluminum parts can be re-powder coated.

Metal products may be cleaned with any standard-grade cleaning solution and a soft cloth. When finished, thoroughly rinse product to remove all cleaning solution. Do not use abrasive cleaners or scrubbing pads to clean these parts, as they may damage the surface of the product and cause it to lose its luster. Harsh, acidic cleaners may also damage the product and are not recommended.

Metal products used in the food service industry may be cleaned with standard degreasers and sanitizers.

In the case of severe damage to the finish, please contact Wausau Tile, Inc. We can offer touch-up advice or replacement parts.

If there are any questions on cleaning procedures or products, please contact Wausau Tile, Inc. at 800-388-8728.

Corian[®] and Lumber Care & Maintenance Procedures

Wausau Tile's Corian[®] and Lumber site furnishing items can be easily maintained to preserve the attractive appearance and extend the life of the product. If you have any further questions regarding maintenance or any other subject, please contact us at 800-388-8728. When using these procedures, please follow the product manufacturer's instructions regarding the use of any equipment or cleaning materials described here.

Corian[®] Annual Maintenance

Soapy water, ammonia-based cleaners or commercially available solid surface cleaners will remove most dirt and residue. Stubborn residue will require a little stronger cleaner such as Comet[®].

Do not use chemicals such as: chlorinated solvents, chloroform, ketones, methylene chloride (paint removers) or acids.

For routine care & maintenance or repairs, please visit the link below and review the technical bulletin:

http://www2.dupont.com/Surfaces_Commercial/en_US/assets/downloads/pdfs/Maintenance/CORIAN_CARE_IN_USE.pdf

Lumber Annual Maintenance

Wausau Tile is not a reseller for any of the products listed below. If you want to purchase any of the items below please contact the manufacture for purchasing options.

Clean hardwood at least once a year with a proper wood cleaner. Keep the wood clean, free of debris and standing water for long periods of time.

Examples of off-the-shelf cleaners:

Messmer's Wood and Deck Part A Cleaner

Penofin Pro-Tech Cleaner

(Always follow the manufactures written instructions.)

Protectants / sealers are not required but will help keep the color of the lumber present for a longer period than unprotected / sealed. If a protectant is not reapplied annually, the hardwood will fade in color on the surface.

Examples of off-the-shelf protectants:

Messmer's Natural Wood Finishes

Penofin Hardwood Finish.

(Always follow the manufactures written instructions.)

The surface of all hardwoods will fade naturally overtime due to UV. Once the hardwood has faded, it can be rejuvenated. Below are a few examples of ways to rejuvenate your hardwood.

Use an orbital sander with 120 grit sandpaper or use a pressure-washer with less than 3,000 psi, 12” to 16” from the surface and a fan-tipped nozzle.

Messmer’s Contact Info:

1-800-731-3669

www.messmers.com

Penofin Contact Info:

1-800-736-6346

www.penofin.com

GUIDELINES FOR PRECAST CONCRETE TREAD INSTALLATION – 5/28/2015

1. SUBSTRATE INSPECTION

- A. Surface inspection for cracking and defects.
- B. Dimension verification of architectural, shop drawings and substrate.
- C. Any corrections to substrate are to be completed before installation.

2. PRECAST TREAD LAYOUT

- A. Finish heights at all floors and landings to be established.
- B. Divide number of risers into the floor to landing height and determine the exact riser height.
- C. Establish exact tread width.
- D. Layout and mark all finished nosing locations on walls or stringers of stairway.
- E. Check precast tread dimensions before setting.

3. INSTALLATION OF PRECAST TREADS - THINSET APPLICATION

- A. Substrate of concrete or steel (steel at interior application only) must be within a tolerance of 1/8" in all dimensions.
- B. Steel or concrete surface to receive precast is to be primed with a concrete bonding agent.
- C. Latex modified thin set mortar is used in a full bed method over concrete substrate. Epoxy thin set is used over steel substrate.
- D. Set treads level and plumb to meet finished nosing layout marks.

4. INSTALLATION OF PRECAST TREAD - MORTAR SET APPLICATION

- A. Steel or concrete surface to receive precast is to be primed with a concrete bonding agent.
- B. The height of the mortar bed is established based on tread nosing layout marks. The mortar bed is then placed or screeded over primed substrate.
- C. Treads to be placed level and plumb to established nosing layout marks.

5. INSTALLATION OF PRECAST CONCRETE TREAD - TAB SET APPLICATION

- A. Substrate of concrete or steel (steel at interior application only) must be within a tolerance of 1/8" in all dimensions.
- B. Tabs to be set at front and back of tread every 18" to 24" maximum.
- C. Set treads level and plumb to established nosing layout marks.
- D. Shimming may be required if substructure is not true.

6. CAULKING OF PRECAST TREADS

- A. Clean all joints thoroughly, removing all debris.
- B. Wipe all joints with caulk manufacturer's recommended cleaner prior to application.
- C. Use a urethane caulk. (Color match caulk to precast per architect selection.)
- D. Clean up after caulking as per caulk manufacturer's recommendations.

7. FINAL CLEANING AND SEALING OF PRECAST TREADS

- A. Clean treads with a pH balanced soap.
- B. Check all surfaces and caulking, make repairs as necessary.
- C. Apply a coat of concrete sealer as per manufacturer's recommendations. (Precast must be completely clean and dry before sealer is applied.)

SECTION 3400

Precast Concrete Amenities

Part 1 - General

1.1 SUMMARY

- A. Types of precast concrete work include:
 - 1. Precast Concrete Stairs
 - 2. Precast Concrete Caps
 - 3. Precast Concrete Copings
 - 4. Precast Concrete Wall Panels
 - 5. Precast Concrete Base
 - 6. Precast Concrete _____
- B. Setting material, grouts, sealants and caulks.
- C. Installation of precast concrete stairs, caps, copings, etc.
- D. Related work not specified under this section.
 - 1. Installation of steel units to receive precast concrete.
 - 2. Installation of concrete substrate to receive precast concrete.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM C-150
 - 2. ASTM C-33
 - 3. ASTM C-260
 - 4. ASTM C-494
 - 5. ASTM C-128
 - 6. ASTM C-31
- B. Precast Concrete Institute (PCI)
- C. American Concrete Institute ACI-318

1.3 SUBMITTALS

- A. Shop Drawings
 - 1. Submit shop drawings of all precast concrete items showing detail sections and profile for all precast items. Details shall show all reinforcing and special hardware required for fastening.
- B. Samples
 - 1. Submit 1 sample, 6" x 6" size for each color.
 - a. Color to be selected from Wausau Tile Site Furnishings color chart.
 - b. Sample to be submitted for color and texture.
 - c. Match existing or architect's sample.
 - 2. Submit copy of Quality Assurance and Procedure Program.
- C. Performance Requirements
 - 1. Compressive Strength 5000 p.s.i.
 - 2. Air Content 6-8%
 - 3. Water-Cement Ratio. 45:1
- D. Certification

1. Suppliers shall furnish certification attesting that materials meet specification requirements.

1.4 QUALITY ASSURANCE

- A. PCI Standards: Produced by a PCI Certified Plant according to all PCI provisions and recommendations.
- B. Precast manufacturing plant shell be certified, category AT – Architectural Trim, by the Precast Concrete Institute (PCI) at the time of bidding.
- C. Manufacturer's Instructions: In addition to specified requirements, comply with precast concrete manufacturer's instructions and recommendations for substrate preparation, material storage, mixing and application, finishing and curing.
- D. Qualifications: Precast Concrete Manufacturer and Trade Contractor must have a minimum of 5 years of successful experience on projects of similar magnitude and complexity to that indicated project. Manufacturer and contractor to be prequalified by architect prior to bidding. Failure to prequalify will void bid.
- E. Manufacturer to supply a written Quality Assurance Program and Procedure Manual.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Packaging and Shipping: Precast concrete to be palletized and shrink wrapped, delivered in original unopened packaging with legible manufacturer identification, including size, piece number, quantities, manufacture date and inspectors initials.
- B. Storage and Protection: Precast concrete to be stored in secure area in original packaging. Protect from damage by other trades.

1.6 WARRANTY

- A. Manufacturer/Installer shall warrant installed system for a period of 2 years from date of substantial completion against failure of workmanship and materials.

Part 2 - Products

2.1 MANUFACTURERS

- A. Acceptable manufacturer.
 1. Wausau Tile, Inc. PO Box 1520 Wausau, WI 54402-1520 (715) 359-3121
- B. Clarification Note: Drawings and specifications are based on manufacturer's proprietary literature from Wausau Tile, Inc. Other manufacturers shall comply with minimum levels of material specifications and detailing indicated on the drawings specified herein.

2.2 MATERIALS

- A. Portland Cement: ASTM C-150 specifications for Portland Cement.
- B. Aggregates: All aggregates to meet ASTM C-33 specifications, cleaned and properly graded to size. Aggregates shall be blended to meet individual project requirements.
- C. Coloring: Pigments used shall be inorganic, resistant to alkalinity and used per manufacturer's recommendations.
- D. Reinforcement and Hardware
 1. To conform with ACI and manufacturer's design.

2. Reinforce precast with deformed rods or wire, or both, as recommended by precast concrete manufacturer.
- E. Caulks and Sealants
1. Polyurethane or acrylic sealant
 2. Color to be selected by architect from standard color pallet.
- F. Sealer: Colorless, pure acrylic water-repellent penetrating sealer. Sealer to maintain natural look of concrete surface with no glaze or gloss, darkening or color change.

2.3 MANUFACTURED UNITS

- A. Sizing Tolerances
1. All units to conform to shop drawings, with a 1/8" tolerance in dimension.
- B. Precast Surfaces and Edges
1. All exposed edges to have minimum 1/8" chamfer to prevent chipping.
 2. Finished surfaces to match approved control sample.
 3. All precast concrete finished surfaces to be sealed with a sealer approved by manufacturer.

Part 3 - Execution

3.1 INSPECTION

- A. Examine areas to receive precast concrete for the following:
1. Defects in existing work or substrate.
 2. Deviation beyond allowable tolerances for the substrate.
- B. Start work only when defects have been corrected by others.

3.2 INSTALLATION

- A. Setting
1. Set accurately as shown on approved shop drawing. Setting methods are:
 - a. Mud or Thin Set
 - b. Weld or Bolt
 - c. Setting Clips/Hangers
 - d. Tab Set
 2. Alignment of precast should be straight and true to all dimensions. It may not vary more than 1/8" in length, height or width.
 3. Install anchors as shown on details.
 4. Fill joints between with manufacturer approved caulk or as specified.
- B. Protection
1. Upon completion, the work shall be ready for final inspection and acceptance by the owner or owner agent.
 2. General contractor shall protect the finished work from the time the installing contractor completes the work.
- C. Finish
1. Overall uniformity in matrix and aggregate.
 2. All product to be sealed with approved sealer.