



TUFFLOOR[®] TILES

PRECAST HIGH-TEMPERATURE FLOORING



Global **Refractory** Solutions



process
STRONG AND VERSATILE
TUFFLOOR®
refractory

TUFFLOOR® is designed for areas subjected to extreme thermal cycling and intermittent exposure to liquid metal spills, dross and slag. It is a versatile product that may be installed as a complete floor, over existing (or new) concrete, or as precast tiles.

TUFFLOOR® has over 20 years of proven performance in ferrous and non-ferrous foundries, primary metal production facilities (aluminum, steel, iron, zinc, copper, ferro-alloys), rolling mills and many additional hot flooring applications.

The **TUFFLOOR** family includes **TUFFLOOR®**, **TUFFLOOR 7®**, **TUFFLOOR® HT** and **TUFFLOOR® HT ACX**.

Benefits include:

- Fast turn around time due to its early strength development
- Exceeds cold crushing strength of conventional concrete
- Reduces maintenance time and expense
- Safer working surfaces
- Minimizes wear on mobile equipment
- Custom colors available
- Excellent freeze-thaw characteristics



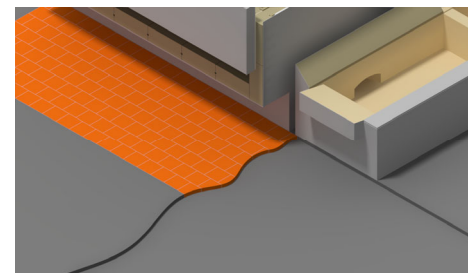
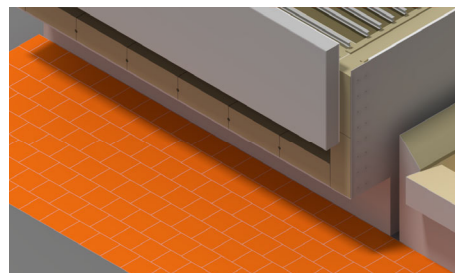
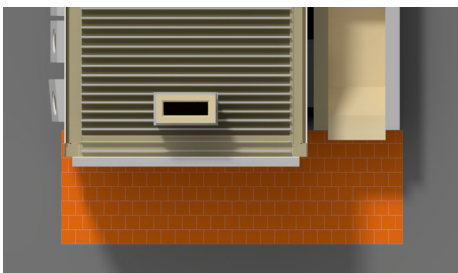
TUFFLOOR® **Standard Concrete**
Thermal Cycling to 1400°F (760°C)

DESIGN ENGINEERING

Allied's team of experienced engineers uses advanced software to create the best **TUFFLOOR®** tile system to meet your application requirements.

TUFFLOOR® tile flooring is applicable in virtually any area that would be a candidate for cast-in-place **TUFFLOOR®**.

Tiles may be ordered in a wide range of colors using additives that will not fade or discolor.





READY TO USE, CUSTOM ENGINEERED PRECAST TUFFLOOR® TILES

TUFFLOOR® precast tiles arrive ready for installation. Much like cast-in-place TUFFLOOR® installation areas, TUFFLOOR® tile designs are manufactured to fit variable size and geometry flooring areas. Precast tiles eliminate the need to wait on strength development of cast-in-place TUFFLOOR®.



Custom floor tiles available for heavy load applications



A variety of colors available

RECOMMENDED USE

FOUNDRY

Channel and Coreless Furnace Decks | Furnace Pits | Mold Shake-Out Areas | Ladle Pouring Station Floors | Cupola Pits | Aisle Ways | Pig Cooling Bays | Pouring Line Floors | Slagging Station Floors

ALUMINUM

Furnace Area Floors | Casthouse Floors | Die Cast Shop Floors | Hot Slab and Coil Storage Areas | Dross Cooling and Transfer Area Floors | Ladle Pads and Pouring Station Floors

STEEL

COKE OVEN: Coke Oven Wharfs | Quench Stations | Oven Tops

BLAST FURNACE: Casthouse Floors | Tuyere Platform Floors | Track Areas at Hot Metal | Pouring Stations

BOF: Hot Metal Pouring Station Floors | Slag Skimming Station Floors | Furnace Deck | Ladle Teaming Area Floors

ARC FURNACE SHOPS: Ladle Preheat Station Floors | Furnace Decks and Pits

OTHER STEEL: Desulfurization Station Floors and Decks | Sinter Machine Area Floors and Decks | Ladle Metallurgy Station Floors and Decks | Degasser Station Floors and Decks | Slab Mill Runout Table Floors

COPPER

Decks and Floors | Pre-heating Stations | Spill Containment Pads Around Furnaces | Spill Containment Pads at Casting Stations | Splash and Heat Panels | Mold Preheating and Cooling Areas



INSTALLATION GUIDE

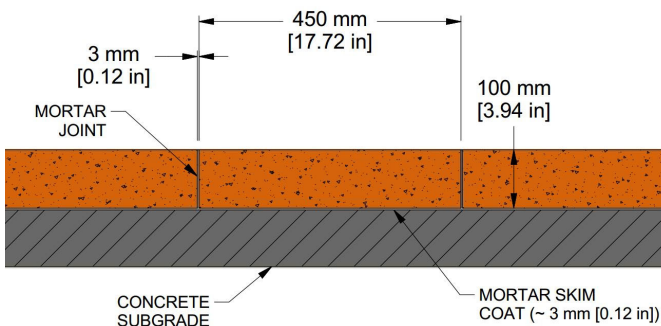
REQUIREMENTS FOR INSTALLATION:

- Level concrete surface with a subgrade modulus of 68000 kN/m³ (250 pci) or greater*
- BRIKSET mortar to be used between TUFFLOOR precast tiles, 3 mm (0.12 in) thick (max. 6mm (0.25 in))
- Skim coat concrete subgrade with BRIKSET mortar at maximum of 3 mm (0.12 in) thick to level surface
- Offset tile joints are optimal
- Field cut TUFFLOOR precast tiles as required

*Contact us for your custom engineered flooring system if your area does not meet these requirements.

Floor Size	Material required	
	TUFFLOOR Tiles*	BRIKSET Mortar
10 m ²	52	4 Pails
15 m ²	77	6 Pails
20 m ²	103	8 Pails
25 m ²	129	10 Pails
30 m ²	155	12 Pails
35 m ²	180	14 Pails
40 m ²	206	16 Pails

*Accounts for 3% overage



TUFFLOOR Tiles + BRIKSET mortar

Each TUFFLOOR tile measures 450 x 450 x 100 mm (17.72 x 17.72 x 3.94 in) and weighs 43 kgs (94.6 lbs)

BRIKSET is a wet Super Duty air setting mortar suitable for applications up to 1649°C (3000°F).

PACKAGING INFORMATION

Tiles:

6 layers, 4 precast tiles/layer = 24 precast tiles/pallet

Pallet Weight = 1032 kgs/pallet (2270 lbs/pallet)

Full Pallet Dimensions = 900 x 900 x 600 mm (35.43 x 35.43 x 23.62 in)

BRIKSET:

36 pails/pallet; 25 kgs/pail (55 lbs/pail)

Pallet Weight = 898 kgs (1980 lbs)

For more information, contact your Allied representative or email us at info@alliedmin.com