specification guide for foundry flats thin brick

standard issue - utilitarian and durable, the standard issue line of foundry flats is well suited to any space and any style – both interior and exterior. the standardized clay surface provides a uniform, clean modern look. american made, foundry flats emphasize classic, industrial style and are manufactured to last and improve with age. 1/2" thick (with the exception of ferrous which has a 3/4" thickness), the flats can be installed on the wall or floors, are suitable for wet areas, interior, exterior, commercial, residential. install in a traditional subway offset, modern straight stacked, or herringbone style.

forge - each piece of the forge line has been manufactured with an artisan approach. manipulated at different stages in production, the textural surfaces create a visceral experience and raku-industrial finish. american made, foundry flats emphasize classic, industrial style and are manufactured to last and improve with age. 3/4" thick (with the exception of sawdust which is ⅝”), the flats can be installed on the wall or floors, are suitable for wet areas, interior, exterior, commercial, residential. install in a traditional subway offset, modern straight stacked, or herringbone style.

general usage: interior floor (cast iron is not suitable for interior floor use), wall, kitchen, backsplash, shower wall, fireplace surround, exterior wall, exterior floor (note that sand cast, sinter, alloy flux and cast iron are not suitable for exterior floors), hospitality, commercial, residential. exterior specification - sand cast, sinter, alloy flux and cast iron are not freeze thaw rated

nominal sizes

standard (2-1/2"x8"x1/2")* and forge (2-1/2"x8"x3/4”)**

*with the exception of ferrous which has a 3/4" thickness.

**with the exception of sawdust which has a 5/8" thickness.

90˚corner piece (return is 3 5/8" on standard and 3 3/4" on forge)

standard specifications

foundry flats shall be selected by the architect/designer/owner from manufacturer’s standard sizes, shapes and glazes. foundry flats meets or exceeds ASTM-C1088 Type TBS or TBX.

note: interior/exterior specification - sand cast, sinter, alloy flux and cast iron are not freeze thaw rated but are otherwise acceptable for exterior wall applications only. for wet applications, specific waterproofing precautions need to taken such as using a

waterproof membrane under the tile and use of a penetrating sealer like miracle 511 porous plus. foundry flats cannot be used in a pool.

availability

a lead time of 2 - 4 weeks is sufficient in most cases, but when out of stock can have a lead-time of up to 8 weeks.

color variation

foundry flats colors vary from brick to brick, some more than others. these variations are intentional, resulting from our particular production methods and our choice of raw materials. when specifying foundry flats, if color consideration is paramount, always work from a sampling of 3 or more bricks, which represent the range of color you can expect on the job.

size variation

due to the manufacturing process, foundry flats is subject to size variation. thickness can vary as follows - 1/2" thickness for wire cut and 3/4" thickness for smooth textures. (with the exception of sawdust which has ⅝" thickness)

floor ratings

Foundry flats thin brick can be used as flooring for the **CTDA load ratings noted below**, if and only if the thin brick is: installed on a sufficiently rigid substrate (to be defined in a forthcoming "best practice recommendations tech bulletin"); installed fully supported and fully bedded in adhesive (polymer modified/latex) mortar; installed with edge restraint or anti-chip edge material on all exposed edges; where only lightly loaded wheels are used (50 pounds per wheel, with rubber or elastomeric "tread"), and, never located where vehicular loading is possible.

1. Subject to load restrictions as noted in load classification table, and installation recommendations.
2. Floor load classification table:

Thin brick can be used for the following CTDA flooring load ratings as noted:

I - Light Residential (powder room, bathroom floor, dining room, bedrooms, etc.)1

II - Heavy Residential (entry way, laundry room, kitchen, mudroom, hallway, stairs, etc.)1

III - Light Commercial (boutique, health offices, etc.)12

IV - Heavy Commercial (hotel lobby, retail, office building, shopping mall, restaurant patron/serving area, etc)123

V - Industrial (restaurant kitchen, bar work area, winery production, exterior hotel entry, airport, car showroom etc) - **Not allowed**

Flooring Load Rating Notes:

1. Wheel loads shall be restricted to 50 lbs maximum. No steel wheeled equipment or devices allowed. Rubber, soft plastic, or elastomeric wheel contact surfaces (“treads”) only.
2. Only where pedestrian occupancy loadings do not exceed 80 psf (100 psf in pedestrian egress corridors).
3. No vehicular traffic, with the exception of golf cart-type service vehicles with soft rubber tires inflated to 20 psi maximum.

Exterior use should be limited to thin brick products that have each individual unit 24-hr cold water absorption test not exceeding 8.0%. (note that sand cast, sinter, alloy flux and cast iron are not suitable for exterior floors)

*cast iron - no interior or exterior flooring applications - because the water absorption rating does not fall within the requirements needed for floor applications (mainly in regards to exterior). also the coating specifically used on cast iron becomes very brittle and is not suitable for flooring (interior and exterior).

Installation recommendations:

Thin brick must be placed on a rigid substrate of either 4” (nominal) reinforced concrete or suspended floor framing of concrete on metal deck, wood subfloor plus underlayment with support members designed for live load deflection less than L/400.

Thin brick shall be fully supported and fully bedded in polymer modified adhesive mortar worked into a clean substrate and onto the clean back of tile with a notched trowel following the guidelines of TCNA floor assemblies for stone or tile, designed/chosen/specified by a responsible design professional.

Use anti-crack membranes or crack control membranes on substrate surfaces as per stone and tile installation requirements.

Install thin brick while the adhesive mortar is wet; press the unit into the receiving mortar prior to it becoming thumb-print hard.

Edges of thin brick flooring must be protected from chipping by flanking walls, concrete curbs, metal edge or anti-chip edge restraints.

Furniture or fixtures should be located and placed vertically, not dragged over the brick surface.

All cementitious materials used for installation should be made with clean, washed sand, and clean, washed aggregate.

When used for exterior applications, avoid using: de-icing salts; non-breathable sealers; and, continuous or excessive moisture.

When used for interior flooring avoid continuous or excessive moisture.

Drilled inserts and post-installed anchors should be avoided, unless embedded into the substrate material and isolated from the thin brick.

maintenance

minimal maintenance is required. mild soaps should be sufficient for most cleaning. test any cleaners before general use. please see our cleaning and maintenance guide for further information.