Jennison-Wright® Stelwood® Guide Specifications

Note: These Guide Specifications are written for a combination of installation requirements.

PART I – General

1.1 System Description

A. These specifications are for a surface hardened concrete industrial floor system consisting of individual 12 inch x12 inch STELWOOD Steel Tile Anchor Floor Plates flanged on all four sides, placed in fresh concrete, with each plate having 53 built-in anchors.

B. Options (select one)
   1. Monolithic Slab Construction
      a. Floors requiring less than 6 inch total thickness
   2. Two Course (Base Slab and Bedment Construction)
      a. Floors requiring more than 6 inch total thickness.
   3. Topping Layer Over Old Floors
      a. Minimum 2 inch bedment.

Note: It is the responsibility of the owner or designer to determine that the structural slab shall be of sufficient strength to support anticipated loads.

1.2 Quality Assurance

A. Supplier Qualifications
   1. Supplier of this floor system shall be The Jennison-Wright Co. or an approved equal who specializes in the manufacture and installation of industrial flooring materials.

B. Contractor Qualifications
   1. The installing contractor shall be a firm experienced in installation of cementitious industrial floors and approved by the manufacturer and/or purchaser.

1.3 Submittals

A. Submit product data

B. Submit representative samples of Steel Floor.

1.4 Delivery, Storage and Handling

A. Store products in accordance with manufacturer's instructions, with labels intact. Flooring shall be kept dry at all times.

1.5 Project/Site Conditions

A. Building shall be completely enclosed and weathertight.

1.6 Warranty

A. The Jennison-Wright Co. warrants for a period of one year from date of installation that STELWOOD Steel Tile Floor Plates are free from defects in materials and workmanship.

PART 2 – Products

2.1 Materials

A. Finished Flooring
   1. The finished floor surface shall consist of 12 inch x 12 inch STELWOOD Steel Tile Anchor Floor Plates made from 11 gage, hot rolled pickled and oiled steel stock, with 1 inch formed flanges having a radius of 1/8 inch and containing 53 angled projecting anchors bent in eight directions on the bottom side of each plate.

B. Floor Joint Pattern (select one)
   1. 6 inch x 12 inch STELWOOD Steel Tile Anchor Floor Plates shall be used to stagger floor joint pattern.
   2. Diagonal Edging Plates shall be used in aisles to form a right angle to the flow of traffic to provide a smooth floor joint pattern for steel wheeled vehicles.

C. Prefabricated Flanges (for welding to field-cut Tiles).

2.2 Mixes

A. Structural strength of concrete, subgrade and reinforcing, to be determined by architect.

B. Options (select one)
   1. Monolithic Slab Construction
      a. Shall contain no aggregate greater than ⅝ inch #8 (crushed stone only) and shall have a slump of 4 inches delivered at job site.
   2. Two Course (Base Slab and Bedment Construction)
      a. Base slab concrete structural strength and aggregate to be determined by architect.
      b. Bedment mix shall contain no aggregate greater than ⅜ inch #8 (crushed stone only - 4,000-lb. mix) and shall have a slump of 4 inches delivered at job site.
   3. Topping Layer Over Old Floors
      a. Bedment mix shall contain no aggregate greater than ⅜ inch #8 (crushed stone only - 4,000-lb. Mix) and shall have a slump of 4 inches delivered at job site.

C. Calcium-aluminate type cement shall be specified for heat resistant applications. (Consult with manufacturer prior to specifying.)

D. Air entraining admixtures, calcium chloride or chloride base additives shall not be used in mixes.

PART 3 – Execution

3.1 Inspection

A. Inspect area to receive Steel Tile Floor Plates and report any discrepancies to the general contractor. Special attention should be given to a well-compacted and level subgrade.

3.2 Installation

A. Options (select one)
   1. Monolithic Slab Construction (6 inches or less)
      a. Concrete shall be screeded to finished floor elevation making no allowance for plate thickness.
   2. Two Course (Base Slab and Bedment Construction)
      a. Structural base slab shall be a rake finish to an elevation 2½" below the grade of the finished floor.
      b. Do not use curing compounds.
      c. Dampen base slab and lightly dust with portland cement, working into the surface with a stiff broom. Immediately place bedment.
   3. Topping Layer On Old Floors
      a. Surface shall be scarified by mechanical means. Remove all loose dirt, dust and debris. Slab surface must be absolutely clean for bonding.
      b. Apply concrete/bonding agent according to manufacturer's instructions.

B. Install concrete screeds for floor areas exceeding 20 feet in width.

C. Establish a straight line before laying plates. Lay plates in concrete with staggered pattern (or optional 45 degree diagonal) and with tight joints.

D. Press plate into concrete mix and tap into place with a rubber type mallet. As each plate is placed in position, the concrete it displaces shall work up through all holes in order to eliminate trapped air. If plate is not fully bedded after tapping down, remove it and add more concrete.

E. As rows are completed, two 2 inch x 12 inch planks shall be centered on a parallel floor joint across the plates providing a platform to work from. As placement proceeds use a 4 foot long straight edge and hammer to level plates in all directions. Before concrete is "set" recheck for final level. Broom off excess cement that has worked through the holes at this time.

F. Prefabricated flanges, as supplied by manufacturer must be welded to the cut edge of all plates prior to installation.

G. After concrete has cured allowing light traffic, broom or power sweep excess cement from surface. Do not use water or power scrubbers, dry sweep only. Excess cement, if any, will quickly wear off during use.

H. Floor shall be protected from heavy traffic until concrete is completely cured. (Consult manufacturer of cement to determine curing time.)

For More Information Contact:

THE JENNISON-WRIGHT CO
P.O. Box 110591 · Cleveland Ohio · 44111-0591 U.S.A.
Phone: 216-671-5900 · Fax: 216-671-1313
Email: Sales@JennisonWright.com