



4. Basic floor laying practices

4.3 Concrete Subfloors

ASTMs may be obtained from www.astm.org

Suitable substrates may include:

- Wood
- Concrete
- Metal
- Existing Flooring
- Epoxy

Unsuitable substrates may include:

- Rubber
- Cushioned Flooring
- Stripwood
- Gypsum based underlayment

- Please reference both ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring and ACI 302.2R-06 Guide for concrete slabs that receive moisture sensitive flooring materials. Please consult www.astm.org and www.concrete.org for the most current editions of these guidelines.

- Moisture testing must be performed on all concrete subfloors, per ASTM F2170. Results are not to exceed 85% IRH. pH testing must be performed per ASTM F710, results not to exceed 9.9.

- Concrete floors must be smooth, rigid, permanently dry, and clean. Floors must be free of all foreign materials, including dust, sealers, paint, grease, oils, solvents, curing and hardening compounds, asphalt, old adhesive residue, and any other contaminants.

- The surfaces of the concrete shall be flat to within the equivalent of 3/16" in 10 ft, per ASTM F710.

- Concrete must have a minimum compressive strength of 3500 psi.

- Lightweight concrete (less than 115 lbs per cubic foot) may be unsuitable for covering with resilient flooring.

- Gypsum based substrates and underlayments are unsuitable.

Control Joints and Expansion Joints

There are two types of joints in concrete. The first type is called a control joint and is saw cut into fresh concrete to "control joint" the slab during the curing process. These should be vacuumed cleaned then filled with an elastomeric compound such as Sikaflex 2c NS. Most Portland based level compounds may also be acceptable.

An alternative would be to install our Joint Cover Strip when there is a potential of control joints showing through the finished flooring.

The second, and most difficult type of joint, is an actual "expansion joint." Most flooring manufacturers do not recommend bridging these joints with their material.

As flooring cannot be installed over joints designed for continued movement we recommend the use of Altro Joint Cover Strips or other appropriate expansion joint cover.