

# Static Dissipative Tile (SDT)

## Installation System

Product	Adhesive	Comment
EXCELON SDT	S-202	Roll tile with 100-lb. roller; copper grounding strips provided with adhesive

### Suitable Substrates:

All substrates listed below must be properly prepared and meet the requirements discussed in Section IV, Subfloors and Underlayments. There may be certain exceptions and special conditions for these substrates to be suitable for the SDT Installation System.

- Concrete
- Approved Suspended Wood

**▲ CAUTION** Both the SDT and the S-202 Adhesive contain a small amount of **quaternary ammonium compound**. For some people, this material may irritate both skin and eyes. Avoid direct contact with the adhesive if at all possible. The adhesive is water based. Wash hands thoroughly with soap and water after handling either the tile or the adhesive.

### Job Conditions/Preparation:

- Substrates must be dry, clean, smooth and free from paint, varnish, existing adhesive residue\*, wax, concrete curing agents, sealers and hardeners.
- In renovation or remodel work, remove any existing adhesive residue\* so that 80% of the overall area of the original substrate is exposed. Subfloor must be porous when installing SDT.
- SDT is not recommended over existing resilient floors. The surface of ceramic, terrazzo, marble, polymeric poured (seamless) floor or metal would need to be roughened and then a Portland cement type underlayment such as S-194 applied at least 1/4" thick.
- Do not install SDT in areas subject to excessive surface water or frequent spills.
- Allow all flooring materials and adhesives to condition to the room temperature a minimum of 48 hours before starting the installation.
- The area to receive resilient flooring should be maintained at a minimum of 65°F (18°C) and a maximum of 100°F (38°C) for 48 hours before, during and for 48 hours after completion.
- During the service life of the floor the temperature should never fall below 55°F (13°C). The performance of the flooring material and adhesives can be adversely affected below this minimum temperature.

---

\* Some previously manufactured asphaltic "cutback" adhesives contained asbestos (see warning statement on page xi). For removal instructions, refer to the Resilient Floor Covering Institute's publication Recommended Work Practices for Removal of Resilient Floor Coverings.

- Conduct calcium chloride tests or percent relative humidity tests. Bond tests should also be conducted for compatibility with the substrate. Please refer to Section IV, Subfloors and Underlayments.
- Radiant-heated substrates must not exceed a maximum surface temperature of 85°F (29°C).
- Concrete floors should be tested for alkalinity. The allowable readings for the installation of Armstrong flooring are 5 to 9 on the pH scale.

Adhesive	Open Time	Working Time
S-202	60 minutes or more <b>Fine Notch:</b> 1/32" deep, 1/16" wide, 5/64" apart	6 hours

**Note:** Adhesive should be dry to the touch before installing tile. The amount of open time will vary according to job conditions, temperature, humidity, air flow and type of substrate.

**Fitting:**

See Section VII, Layout and Fitting, for room layout.

Before installing the material, plan the layout so tile joints fall at least 6" away from subfloor/underlayment joints. Do not install over expansion joints. Avoid having border pieces less than 6" wide.

**Procedure:**

When using tile from two or more cartons, check to be sure all pattern and lot numbers are the same to ensure proper color match. On larger installations, open several cartons and mix them as they are installed to help blend any slight shade differences from one carton to the next.

1. Line off the entire area to be installed.
2. Apply the S-202 Adhesive over the area not covering the chalk lines. Allow the adhesive to set until dry to the touch approximately 60 minutes depending on atmospheric conditions. To test, press your thumb lightly on the surface of the adhesive in several places. If the surface feels slightly tacky as your thumb is drawn away and does not stick to your thumb, the adhesive is ready for the installation.
3. Cut copper strips (0.003" thick) which are supplied with the adhesive into two-foot strips. Generally, one grounding strip (two-foot length) is recommended for every 1000 sq. ft. of SDT installed over concrete on grade. For suspended subfloors, one grounding strip is recommended for every 500 ft<sup>2</sup> of tile. Additional strips may be requested by the end-user. The installer should receive some guidance from the general contractor or end-user as to the desired location of the copper strips to make subsequent grounding more convenient.
4. Install the tile along the chalk lines, laying the field area first and then fitting in the border tile.

5. In the copper grounding strip locations, place 18" of the copper grounding strip over the dry-to-touch S-202 Adhesive on the subfloor. The remaining 6" of the strip should continue up the wall. Apply additional S-202 Adhesive over the 18" section of the copper grounding strip on the floor. Allow this adhesive to dry to the touch and install the tile over the strip.
6. Roll in both directions within the adhesive's six-hour working time using a 100-lb. roller. Clean adhesive residue from the surface of the flooring using a clean white cloth dampened with mineral spirits.
7. Flooring should not be exposed to rolling load traffic for at least 72 hours after installation to allow setting and drying of the adhesive.
8. Follow Initial Maintenance Procedures in Section XIV.

#### **Grounding of Excelon SDT:**

It is NOT the responsibility of the flooring contractor to actually ground the strips. Grounding is normally done by an electrician. It is important to note that it is the responsibility of the end-user and/or electrician to make certain that the grounding method employed meets applicable code requirements. The ground connection may be made to either an earth ground or an electrical ground. Two methods of grounding normally used are as follows:

1. Ground to steel support columns: Drill and tap holes in the steel column, and fasten the copper strip using a machine screw.
2. Connect to ground bus: Solder a wire (#12 or #14) to the copper strip and connect this wire to a ground bus in accordance with applicable building or electrical codes. Once the connection is made, copper strip and wire may be hidden or covered as desired.

#### **Precautions:**

- If electrical certification of an installation is required, do not perform **any** maintenance procedures until after certification has been completed.
- **Use Only Armstrong S-392 Static Dissipative Tile Polish on SDT.**