

# Stone Deck Specifications

## 1) Stone Deck Panel

- a. Size- 16" x 16" = 1.78 square feet
- b. Fiberglass and Stone union
- c. System thickness is 1 1/16" from top of joist to top of stone.
- d. Panel weight = 8 to 10 pounds per s.f. depending on stone type.
- e. Panel Strength minimum of 4000 p.s.f. of flexural strength. Strength varies with stone and done in accordance with AC #174.
- f. Flame spread meets ASTM E 84

## 2) Fiber Re-enforced Backing

- a. meets or exceeds ASTM test
  - i. D790 - Flexural strength
  - ii. D638 – tensile strength
  - iii. D695 – Compressive strength
  - iv. D953 – Bearing strength
  - v. D570 - Water Absorption
  - vi. D696 - Coefficient of Thermal Expansion
  - vii. D635 - Self Extinguishing

## 4) Stones

- a. Size nominal 16" x 16" x 9/16"
- b. Stones have an ASTM #C121 water absorption of .01%-1.1% depending on stone type. **Granites** have an ASTM #C1026 Freeze thaw unaffected rating or a natural resistance to damage under freeze thaw conditions.
- c. Generally all stones have an ASTM# 1028 coefficient of friction equal to or greater than wood or composites. (**Granites** have a thermal or sandblasted surface and **Slates** have natural clefing)

## 5) Joist Plate

- a. High Strength Polyethylene composite – 9 5/8 inches long with a connecting spline molded to the plate. Four 1/8" spacers are molded to the plate on each wing to self space the Stone Deck panels. Each **Joist Plate** is pre-drilled to run on top of the joist and requires a minimum of three screws (one in the center and two in opposing holes on top of the joist).

## 6) Screws

- a. Use #7 x 1 1/4" countersunk screws in the **Joist Plate** countersunk screw holes.
- b. Make sure screws are compatible with the framing material.

## 7) Construction Adhesive

- a. Use an exterior grade construction adhesive (PL400 or equivalent) to fasten panel to **Joist Plate** as necessary

**8) Sealer**

- a.** Use of an impregnator sealer is required to reduce staining and to protect the stone in freeze thaw conditions.