

# MORTAR BED, LIGHTWEIGHT CONCRETE AND SELF-LEVELING GYP-CEMENT OVER WOOD

## GENERAL REQUIREMENTS

- **POURED CONCRETE SUB-FLOORS** must be reinforced with steel rebar or wire mesh, level, structurally sound, free of holes, projections over 1/8", cracks over 1/8" wide and cured for a minimum of 28 days. Substrate must be free of moisture, sealers, or any materials that would interfere with a good bond.
- **WOOD SUB-FLOORS** must consist of joist spacing no more than 16" on center for dimension lumber or 24" o.c. for Code approved floor trusses, with a minimum 1-1/8" T&G single floor thickness, or a double sub-floor consisting of a minimum of 5/8" thickness for each layer, screwed and glued together and to the supporting framing, or a 3/4" T&G ply sub-floor screwed and glued to the support framing according to Code standards and sub-floor manufacturer specifications.

**IMPORTANT!** *Deflection of substrate must not exceed L/360 of the span when measured under a 300 pound concentrated load (See ASTM C627), with a maximum variation of 1/4" in 10' from the require plane.*

*If you are unsure of the composition of the underlying structure and its' design limits, or are unable to ascertain the composition and stability of any substrate, it may be advisable to forego the installation of ArcusStonecoat to avoid potential for extensive cracking or delaminating of the ArcusStonecoat surface due to unforeseen structural or flexural problems associated with the substrate.*

- **ANTI-FRACTURE CRACK ISOLATION MEMBRANES** are strongly recommended for horizontal applications, over wood sub-floors. They should be installed following manufacturer's recommended procedures. They act as a buffer, absorbing thermal and structural movement of the sub-floor, which helps protect the ArcusStonecoat finish from cracking due to substrate shrinkage, reverberation and bounce.

### SOURCES:

- National Applied Construction Products, Inc. 800-633-4622, or [www.nac-anti-fracture.com](http://www.nac-anti-fracture.com)
- Laticrete also offers crack suppression/anti-fracture products such as Laticrete Blue 92 and Laticrete Iso Mat Crack Suppression Membrane. (800) 243-4788 or [www.laticrete.com](http://www.laticrete.com).
- The Noble Company. [www.noblecompany.com](http://www.noblecompany.com)

## MORTAR BEDS

- **A minimum thickness of 1-1/2 inches**, free of structural cracks (hairline shrinkage cracks are acceptable).
- **Shall be wire mesh reinforced.**
- **Shall have waterproofing system** installed underneath.
- **Shall be acrylic modified**, broom finished, and cured at least 48 hours before applying ArcusStonecoat.
- **Shall have a minimum slope of 1" per 10'** to drain runoff water for exterior deck / walkways.
- **Interior showers** or other areas where a drain head is provided, shall be sloped a minimum of 1/4" per foot to drain.
- **Clean** the substrate of any efflorescence, grease, rust, mold, scale, just, debris, and any other surface contaminant that would interfere with direct adhesion of the ArcusStonecoat to the substrate.

## LIGHTWEIGHT CONCRETE AND SELF-LEVELING GYP-CEMENT PRODUCTS

### LIGHTWEIGHT CONCRETE

- Minimum thickness of 1-1/4", free of structural cracks (hairline shrinkage cracks are acceptable).

### SELF-LEVELING GYP-CEMENT

- Self-leveling products such as Gyp-Crete® shall be set and cured per manufacturer's guidelines.
- If using a self-leveling gyp-cement product in conjunction with a heated floor system, it must be of the type approved by the manufacturer of the gyp-cement for this type of use, and properly installed according to manufacturer specifications.

### GENERAL REQUIREMENTS:

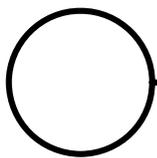
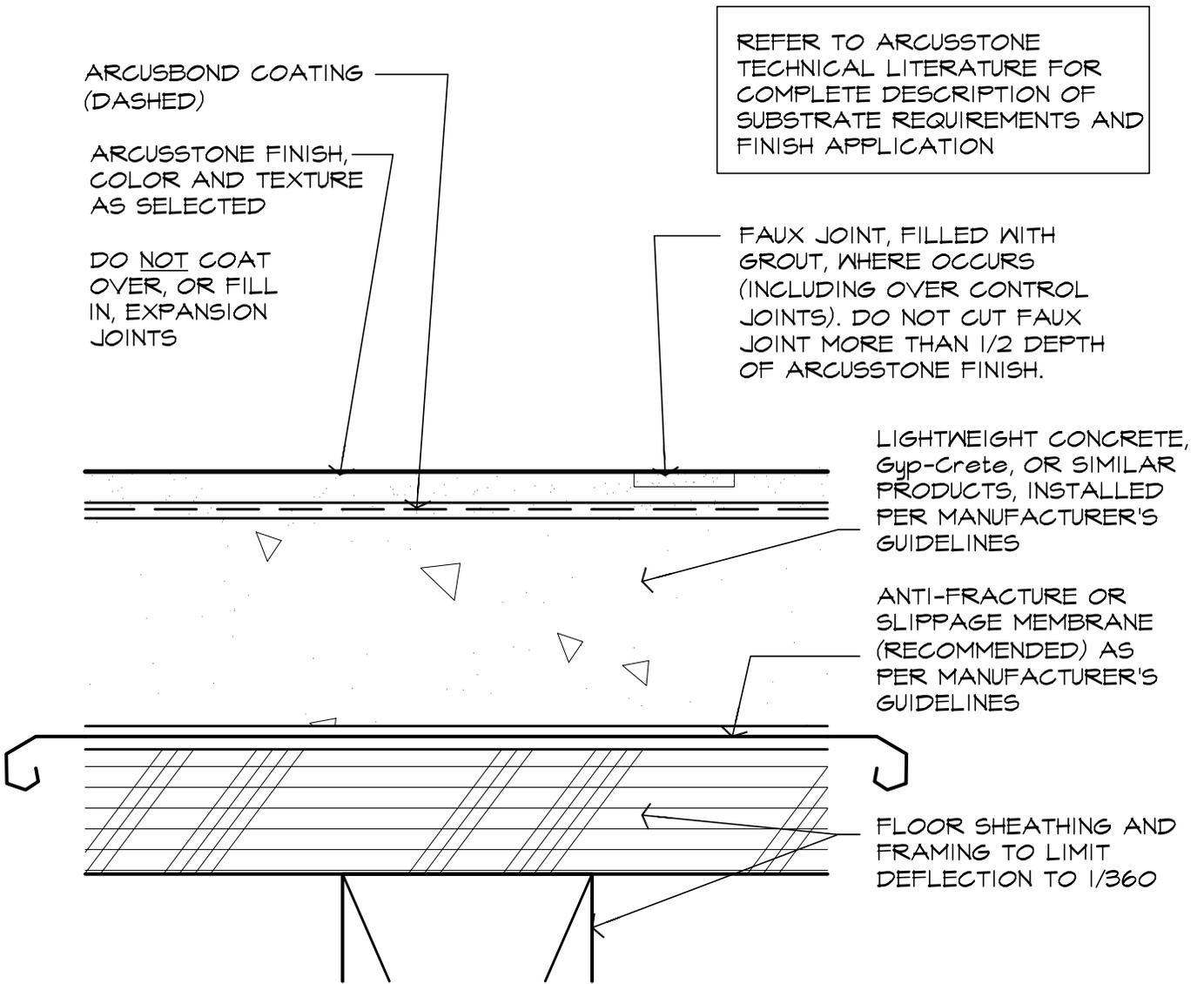
Concrete and Gyp-Cement products shall be applied and cured per manufacturer's installation guidelines prior to the ArcusStonecoat application.

***IMPORTANT!*** Refer to manufacturer's guidelines to assure that substrates such as these have been properly cured and passed any required moisture test prior to the ArcusStonecoat application.

### Control Joints:

- If coating over a **control** joint, provide a coursing pattern (grout line) in the ArcusStonecoat, directly above this type of joint, or bridge the control joint with a crack isolation membrane prior to the ArcusStonecoat application.
- If these guidelines are not followed, the ArcusStonecoat will probably develop cracks at these locations.

***NOTE!*** Do not use the ArcusStonecoat to coat over, or fill in, any expansion joints.



# Lightweight Concrete over Wood

ArcusStone Substrate Preparation

Full Size

All substrates to be in compliance with local codes and regulations, substrate component manufacturer's requirements for installation, and ArcusStone Products' published guidelines.