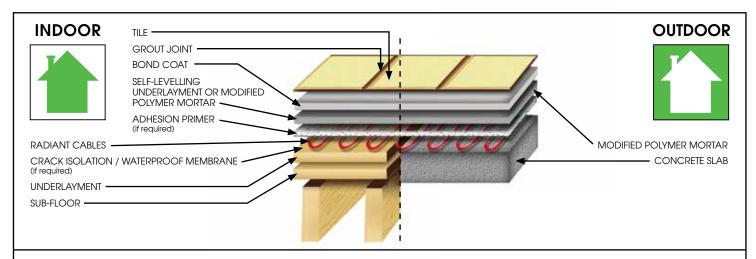


# TILE OVER ELECTRIC RADIANT FLOOR SYSTEMS OVER WOOD/CONCRETE SUBSTRATE (314F-2009/2010)

**SUITABLE SUBSTRATES:** Floor systems, including the framing system and subfloor panels, over which the tile will be installed shall be in conformance with the Canadian National Building Code 2005 and applicable local building codes taking into consideration anticipated live and dead loads.



#### **MATERIALS**

TILE: Ceramic, mosaic, porcelain, quarry, pavers, agglomerate and natural stone.

SUITABLE PANEL SUBFLOOR: Douglas Fir plywood (mandatory when using self-levelling underlayment), Canadian Softwood plywood, Poplar plywood, Construction Sheating or OSB. Minimum 16 mm (5/8") exterior grade plywood meeting CSA 0121 or oriented strandboard meeting CSA 0437.0 or CSA 0325.0, on joists spaced 406 mm (16") o.c. (indoor).

**ADHESION PRIMER:** Px Primer.

SELF-LEVELLING UNDERLAYMENT: Nivex, Flex 24 (indoor), Prolastic 6 500/8 500, Mégaflex, Multirapid (outdoor).

BOND COAT: Prolastic 6 500/8 500, Mégaflex, Multirapid, Optiflex, Multiflex or Flex GT-30.

GROUT: - POLY 500 sanded, POLY 600 unsanded, POLY 800 Precision water-based epoxy grout (indoor).

- POLY 500 sanded mixed with 9022 Latex (outdoor).

## **APPLICATION**

- Install electric heating cable or mat (by others).
- Primer must be used over prepared surface as required by self-leveling manufacturer's recommendations.
- Apply thickness of self-leveling to the recommended thickness by manufacturer.
- Curing/drying of cementitious self-leveling must be strictly followed as instructed by manufacturer before installation of tile.
- Apply tile to bond coat before bond coat skins over. Use sufficient bond coat to ensure minimum 80% contact. Contact shall be evenly distributed to give full support of the tile. Slide tile firmly into position. Allow bond coat to cure.
- Force grout into full depth of joint, remove excess grout and clean.

### **LIMITATIONS**

- Manufacturer's recommendations must be followed.
- Follow manufacturer's recommendations for manufacturer's maximum applied thicknesses.
- Depending on Manufacturer double layer plywood may be required see Detail 313F-A.

## OTHER CONSIDERATIONS

- If waterproof/crack isolation membrane is required follow manufacturer's recommendations (ANSI A118.10-2008 (revised), ANSI 118.12-2005).
- Heating system design, installation and inspection by others.
- Refer to Notes For The Professional and 301MJ-2009/2010.
- Uncoupling system to be placed over heating system. Follow manufacturer's recommendations.
- Insulation layer may be required below plywood subfloor for maximum heating efficiency. Consult heating manufacturer for types and thicknesses.
- Radiant pipe/tube may be substituted for electric wire radiant heat system.
- Electric radiant heat system conforming to UL (CAN/CSA) C22.2#217.