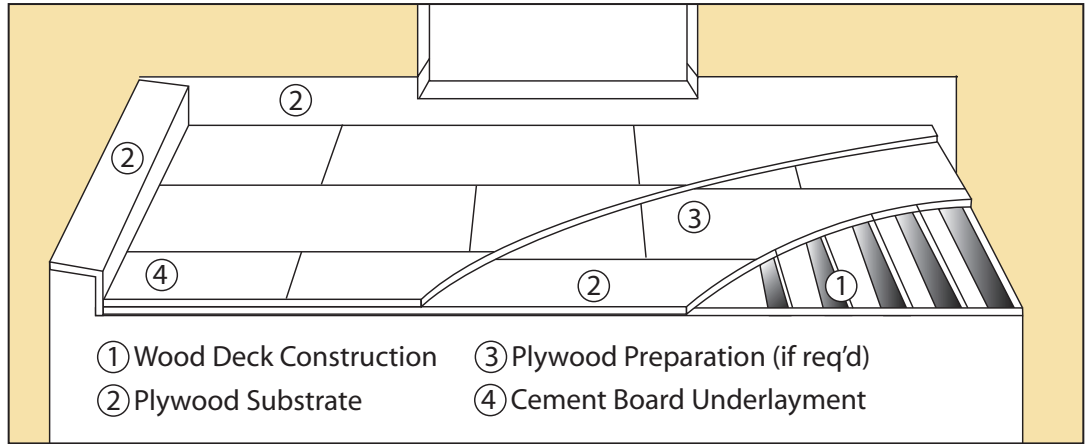


Tiledek Substrate & Underlayment Requirements



General Note: Duradek does not supply framing sheeting and underlayment products. Always refer to manufacturer's written instructions and local building code requirements. Below are Duradek's recommendations. For complete and up-to-date installation procedures refer to Tiledek's installation manual. Ask your Duradek dealer for a copy.

Numbers on drawing above reference notes below

① Wood Deck Construction

- Deflection: Roof decks must have a maximum allowable deflection of $l/720$ (as an expressed ratio of the clear span).
- Joist Spacing: 16" o.c. maximum
- Slope: Minimum slope of 1/4" in 12, (2%, 1 in 50)
- Door Openings: Sill of rough door openings to be 3" to 6" above elevation of finished tile.
- Framing Lumber: Install Kiln-dried lumber with crown sides up.

② Plywood Sub Floor Construction

Plywood requirements

- Profile: T&G
- Grade: C-C Sheathing Grade
- Thickness: 3/4" (18.5mm)
- Exposure Durability: Exterior
- Species: Douglas Fir (DFP), group I or II
- 18% max moisture content

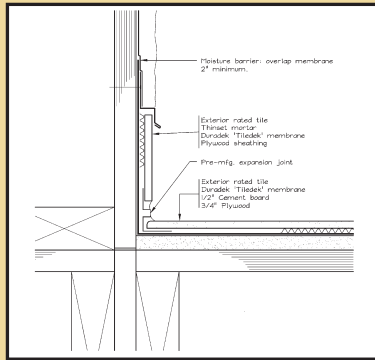
Plywood installation

- Placement: Plywood panels to be installed with the surface grain at right angles to the joists. End joints shall be supported over 2" wood joists. At unsupported joints install 2" x 4" blocking securely nailed between framing members.
- Lightly gap boards, do not force boards together.
- Fasteners: Recommend 2" #10 exterior wood deck screw either stainless steel or coated with non-staining finish. 2 1/2" hot dipped galvanized ring thread or spiral nails
- Fastener Spacing: Space fasteners 6" (150mm) o.c. along edges & 8" (200mm) o.c. along intermediate supports. Drive nails on slight angle. Slightly recess all heads.
- Curbs & upstands: apply 1/2" min plywood (see plywood specs above) to vertical & horizontal surfaces to receive Tiledek membrane.

③ Plywood Substrate Preparation: *for Tiledek assembly TD-3 only, when Tiledek membrane is applied directly to plywood subfloor with drainage mat overlayment and no 1/2" cement backer unit underlayment.*

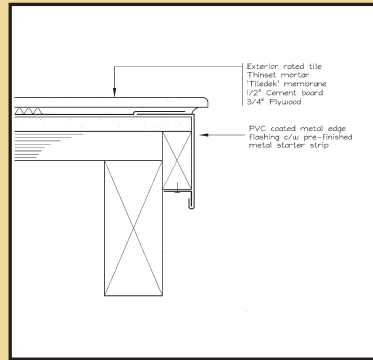
- Spot fill all knotholes, depressions, damaged areas with concrete based fast setting floor patch. Lightly sand complete deck surface smooth to touch.

TILEDEK DETAILS



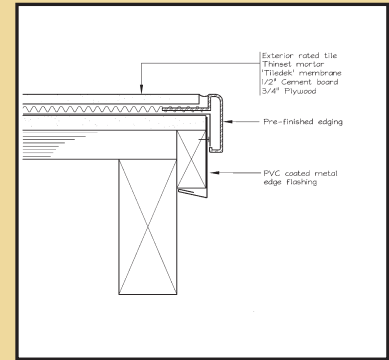
Wall Flashing

IS-1T



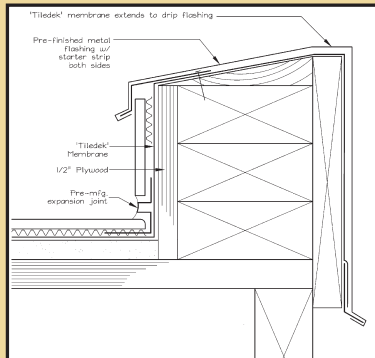
PVC metal drip edge

OS-1T



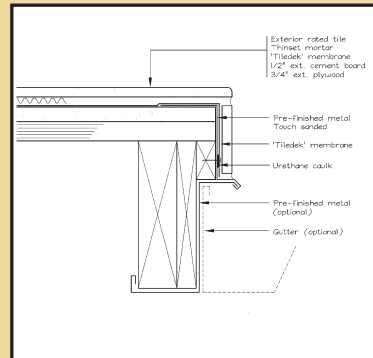
Pre-finished metal drip edge

OS-2T



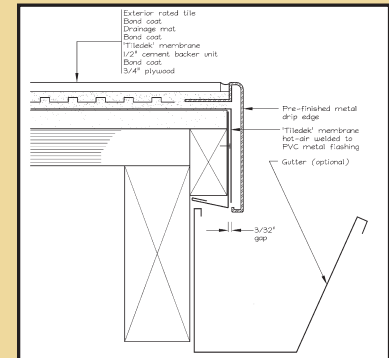
Curb

OS-3T



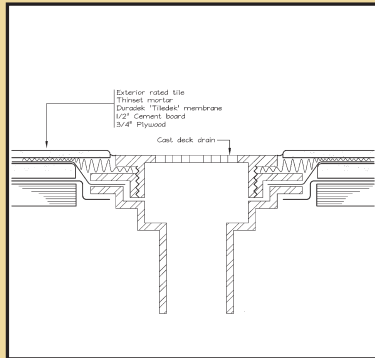
Tiled Drip Edge

OS-4T



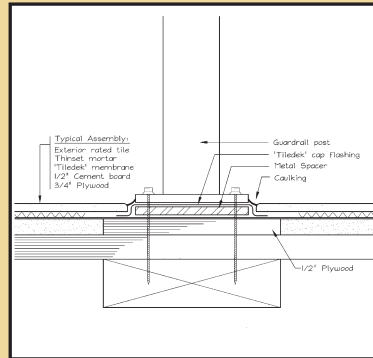
Pre-finished metal drip edge

OS-5T



Deck drain

DR-1T



Guard rail post connection

P-1T

- ④ Cement Board Underlayment: Refer to assemblies TD-1, 2 & 4
 Underlayment: USG/CGC "Durock" cement board. 1/2" x 4ft x 8ft. Durock "Next Gen" acceptable.
 Underlayment adhesive: Polymer modified mortar, Mapei "Ultra-Flex 2" acceptable
 Underlayment fastener: 1-1/4" (32 mm) USG/CGC Durock or Buildex "Rock-On" fasteners
 Joint compound: Mapei Planipatch, Latex-Fortified mortar or equal

Underlayment installation:

- >>>>>> Install CBU panels smooth side up <<<<<<<
- Place panels with joints maximum stagger from plywood subfloor joints. End joints to be placed not over structural framing but at 1/4 span point (ie 4" off center for a 16" joist spacing) Fit panels closely but do not force together, leave a maximum 1/8" (3mm) gap at panel edges and ends. Leave 1/4" (6mm) gap along walls. Fasten panels to subfloor while mortar is wet with 1-1/4" (32 mm) wood screws spaces 6" o.c. in both directions and placed at 1/2" (12.5 mm) from ends and edges. Do not fasten into wood structural framing.
- Laminate 1/2" CBU to 3/4" plywood subfloor using polymer modified mortar. Apply with 1/4" (6mm) square notched trowel. Install CBU immediately. Laminate & secure one panel at a time.
- Finished surface to be true to plane within 1/8" in 10 feet (3.2mm in 3m)

Underlayment Preparation

- Ensure all screw heads are set at or just below surface of CBU
- Fill CBU joints and any damaged areas with polymer modified mortar
- Lightly sand mortar - if required

Protection:

- Protect underlayment from rain & snow after installation to prevent moisture pickup.