

Chevaline Dexx

WA223 - Fixing requirements for Chevaline Dexx to plywood deck/roofing.

In all cases please refer to relevant manufacturer's detailed specifications if the builder/applicator is unsure of methods to be employed. The following is a guide only.

- We recommend 17mm or thicker CD grade flooring plywood as a structural underlay for general usage. However, this can be altered to thicker plywood to suit builder and designer requirements. (refer plywood manufacturers manual).
- Priming of plywood is recommend before installation. Where the underside of the ply is going to be left open to the elements or where it is over a wet area for maximum performance of the applied membrane and substrate, the underside and edges of the ply should be primed.
- Ensure supporting framing is built to adequate falls (generally minimum 1.5 degrees) before installing plywood (falls cannot be readily created later). This is a fall of 1 in 80.
- Framing which deflects when walked over is **not** rigid enough.
- Use CD H3-treated grade or better plywood to provide a smooth surface to adhere the membrane to. Note that T&G plywood still requires support under tongue.
- Ensure sheets are close butted with no gaps. Fill any gaps with a construction grade epoxy filler such as Equus Epar Epoxy filler.
- Lay sheets in a brick bond pattern with the face grain (long ways) across the joist. The plywood must be continuous across at least two spans at right angles to the main supports.
- Glue and screw fixing is recommended at 150mm centers to the perimeter of sheets and 200mm centers down the middle. Rib shank galvanised nails may be acceptable when glue is also used. Ensure all screws/nails are countersunk just below the surface of the plywood. We recommend 10 x 50 stainless steel screws or 50mm rib shank flat head galvanised nails.
- Sand sheet joints to remove any differences in level. Chip out delaminations and fill defects where required with Epoxy filler.
- Form gutters and outlets (ensure lip of outlet is either level with, or below the ply) and check falls. Chamfer all sharp edges. Fit angle flashings to form drip edge when gutter is external type. Allproof waste is strongly recommended. Do not build tunnels please.
- Install 18mm x 18mm treated timber fillets to all right angles. Important that the angle fillets are glued and fixed firmly to the deck (not the wall) to avoid buckling, fixed at 100mm centers.
- Contact membrane applicator as soon as possible to enable your job to be started promptly, to prime the prepared surface. Prim the area with a suitable oil-based primer if the area to be waterproofed is going to be exposed to the elements for more than two weeks.

13. Recommended maximum joist spacing is 400mm nogged at 1200mm. Maximum joist spacing recommended for 17mm plywood is 600mm nogged at 600mm, 19mm or thicker shall be 600mm nogged at 1200mm.

14. Post should not pass through the substrate unless they are going to be clad over. (water can penetrate posts which are left natural or rely on stain or paint for protection).

Commonly Misconceptions:

Will the membrane hide imperfections?

No. As it is gel coating it does not self-level and has a dry film thickness of between 1-1.5mm.

Can it be built up thicker to fix ponding problems?

No. For same reasons as above and also, the system would need drying between the multiply layers required.

If the substrate is wet, can you torch it dry?

No, not if it is wet through as the torch will only dry the surface. The moisture can slow the curing time and will get trapped in, only to reappear as bubbles later.

Can I tile it tomorrow?

Only if tomorrow is 48 hours after the final coat without rain at 18-23°C and 60-70% Relative Humidity. Cooler and/or more humid conditions may prolong dry times.

Can you waterproof under the door when its in?

No, not properly. This is a critical area.

Can you waterproof onto the cladding?

No. It is very important to apply the waterproofing before the cladding is fitted. Most cladding is designed to drain moisture and breathe at the roof/deck junction.

Extracts of the above have been taken from the Branz publication "Good membrane roofing practice", and Carter Holt Harvey "Ecoply manual".

Table 1. Structural support to plywood roof decking (from Carter Hold Harvey plywood roofing manual).							
Roof design parameters	Maximum weight of roofing material	Recommended maximum framing centers in mm for given plywood thickness in mm (1,2,3)					
		12	15	17	19	21	25
Non-trafficable sloping roof	10kg/m ²			900	1200	1200	1350
	50kg/m ²			800	900	900	1200
Non-trafficable flat roof (min. slope 1.5°)	10kg/m ²						
	50kg/m ²			600	800	800	900
Trafficable flat roof (min. slope 1.5°)	10kg/m ²						

Notes: 1. Plywood installed with the face grain at right angles to the framing.
2. The plywood must be continuous across two spans

Table 2. Fixing spacing (from Carter Hold Harvey plywood roofing and decking manual).			
	Maximum fixing spacing in mm for the location within the roof and maximum design wind speed.		
Design wind speed	Fixings within 1500 mm of a gable end	Fixings within 1200 mm of eaves, ridge or hip	Fixings in body of the roof
Up to 37m/sec	100	150	150
Up to 44m/sec	100	100	150
Over 44m/sec	Specific design to NZS 3603 and NZS 4203, or AS 1720.1		

Equus Industries Ltd
PO Box 601
Blenheim
Phone: 03 578 0214 Fax 03 578 0919
Email: admin@equus.co.nz
Web: www.equus.co.nz