



TECHNICAL INFORMATION

UPTURNS/HOBS

An upturn is a raised section of concrete approximately 100mm which is formed as part of the base slab. These in-situ upturns are encouraged where parapet walls or expansion joints are planned to raise the cold joint above the floor level. Fall lines should be incorporated into the slab pour for drainage and elimination of toppings or screeds.

For faster and more effective waterproofing with **Radcon** Formula #7® it is important to take into consideration specific design detailing. These detailing features allow the designer/Builder to optimise the inherent benefits of **Radcon Formula** #7® giving the concrete structure greater durability against the ingress of water and contaminants.

CONSTRUCTION/POUR JOINTS

At these joints, we recommend the use of: a waterstop material such as a PVC-waterstop or a reputable swelling hydrophilic rubber or bentonite clay to alleviate the risk of leakage through potential honeycombing.

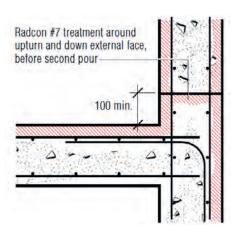
If the slab has already been poured, a reinforced liquid membrane extending 100mm either side of the joint is recommended. Construction joints should be formed vertically with a ,stop board' to ensure good compaction and either side of the joint.

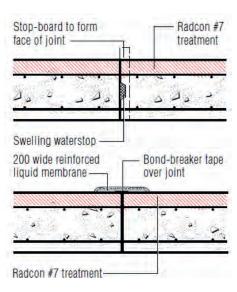
EXPANSIONS JOINTS

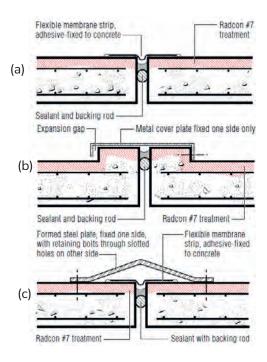
Three expansion joint systems are detailed here:

- (a) for low pedestrian traffic able rooftops involving an adhered membrane strip and elastomeric sealant
- (b) for high pedestrian traffic ooftops involving the use of upturns, metal plating and elastomeric sealant, and
- (c) car park environment using system (a) plus a metal speed hump.

All systems involve a dual approach so that if one material fails then the secondary seal will remain in place.











PENETRATIONS

Where pipes form penetrations through the structural concrete these should be detailed in one of two ways: either.

- (a) use a waterstop material cast in-situ
- (b) use a reinforced liquid membrane strip 100mm around the penetration.

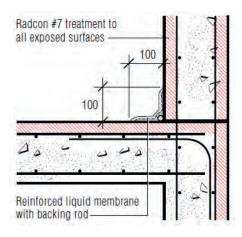
Radcon #7 treatment Reinforced liquid membrane with backing rod Swelling waterstop (a) (b)

COLD JOINTS

Where parapet walls sit directly onto a concrete slab a cold joint is formed.

Possible voids or shrinkage cracks can occur. To waterproof this joint effectively whilst allowing for lateral movement, we recommend the use of a two coat reinforced liquid membrane strip extending 100mm either side of the joint as detailed here.

If upturns are incorporated into the concrete pour then these strip seals are not required saving time and money.



For more detailed drawings of these design considerations please refer to the Datasheet or our technical web page www.radcrete.com.au

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