



**WALL SECTION 1:20**

**RETAINING WALL NOTES:**

1. THE RETAINING WALL LAYOUT AND HEIGHTS ARE DESCRIBED ON THE SITE PLAN.
2. THE WORK SHOULD BE CARRIED OUT BY A PERSON WHO IS FAMILIAR WITH THIS TYPE OF WORK AND CARRIES IT OUT IN ACCORDANCE WITH GOOD BUILDING PRACTICE.
3. BACKFILL IS TO BE CLEAN SAND ONLY. DO NOT BACKFILL UNTIL POST - HOLE FOOTING HAS REACHED ADEQUATE STRENGTH.
4. DO NOT SURCHARGE WALL WITH MACHINERY ANY CLOSER THAN A DISTANCE EQUAL TO THE WALL HEIGHT, UNLESS THE WALL IS ADEQUATELY PROPPED AT THE POSTS AND THE CENTRE OF THE PANELS DURING COMPACTION.
5. FOR LEVEL BACKFILL, NO SURCHARGE LOAD (OTHER THAN SPECIFIED ON THIS DETAIL) TO BE PLACED CLOSER TO THE WALL THAN A DISTANCE EQUAL TO THE RETAINED HEIGHT OF THE WALL. IF BACKFILL SLOPES, INCREASE THIS DISTANCE TO 1.2 TIMES THE RETAINED HEIGHT.
6. WHEN TERRACING, FOR LEVEL BACKFILL, UPPER WALL TO BE NOT CLOSER THAN THE RETAINED HEIGHT OF THE LOWER WALL. IF BACKFILL SLOPES AT 1:10, INCREASE THIS DISTANCE TO 1.2 TIMES THE RETAINED HEIGHT. IF BACKFILL EXCEEDS 1:10 AND IS LESS THAN 25°, INCREASE DISTANCE TO TWICE THE RETAINED HEIGHT.
7. THESE SPECIFICATIONS ARE FOR SAND SITES & COHESIVE SOIL (VERY STIFF CLAY) SITES AND WITH THE MAXIMUM WATER TABLE BELOW THE BOTTOM OF THE POST. FOR OTHER SITES REFER TO THE ENGINEER.
8. a) FOR SAND SITES, THE POST MUST BE PLACED INTO SAND COMPACTED TO A DENSITY WHICH TESTS (TO THE FULL DEPTH OF THAT FILL) AT LEAST 6 BLOWS PER 300mm USING THE STANDARD PERTH PENETROMETER.  
 b) FOR CLAY SITES, THE POSTS MUST BE PLACED IN UNDISTURBED NATURAL GROUND OR THAT THE SOIL IN THE VICINITY OF THE POST FOOTING HAS A MINIMUM OF 95% MDD (MAXIMUM DRY DENSITY).

**DESIGN PARAMETERS:**

1. FOR NO SURCHARGE  
POST SPACING AT 1150mm CENTRES.
2. FOR UP TO 2.5 kPa SURCHARGE (INCLUDING LIGHT VEHICLE SURCHARGE)  
POST SPACING AT 1150mm CENTRES UP TO 1.2m RETAINING & AT 600mm CENTRES ABOVE 1.2m RETAINING.
3. FOR UP TO 2.5 kPa SURCHARGE - WHEN BACKFILLING UP TO @ 25° (1:2.5)  
POST SPACING AT 1150mm CENTRES UP TO 1.2m RETAINING & AT 600mm CENTRES ABOVE 1.2m RETAINING.

**NO SURCHARGE & NO FENCE OVER**

H	No. OF 300 mm PANELS. ADJUST AS REQUIRED FOR 450 mm PANELS.	D	B	T
UP TO 300	1	300	Ø350	10
UP TO 600	2	600	Ø350	20
UP TO 900	3	900	Ø350	30
UP TO 1200	4	1200	Ø400	40
UP TO 1500	5 + 1	1200	Ø400	50

**NO SURCHARGE & FENCE OVER**

H	No. OF 300 mm PANELS. ADJUST AS REQUIRED FOR 450 mm PANELS.	D	B	T
UP TO 300	1	300	Ø350	10
UP TO 600	2	600	Ø350	20
UP TO 900	3	1000	Ø400	30
UP TO 1200	4	1300	Ø400	40
UP TO 1500	5 + 1	1400	Ø450	50

**2.5 kPa SURCHARGE & NO FENCE OVER**

H	No. OF 300 mm PANELS. ADJUST AS REQUIRED FOR 450 mm PANELS.	D	B	T
UP TO 300	1	300	Ø350	10
UP TO 600	2	600	Ø350	20
UP TO 900	3 + 1	900	Ø350	30
UP TO 1200	4 + 2	1200	Ø400	40
UP TO 1500	5	1050	Ø400	50

**2.5 kPa SURCHARGE & FENCE OVER**

H	No. OF 300 mm PANELS. ADJUST AS REQUIRED FOR 450 mm PANELS.	D	B	T
UP TO 300	1	300	Ø350	10
UP TO 600	2	600	Ø350	20
UP TO 900	3 + 1	1100	Ø400	30
UP TO 1200	4 + 2	1350	Ø400	40
UP TO 1500	5	1300	Ø400	50

9. BACK FILL HOLES FOR POSTS WITH EITHER:  
 a) 1 CEMENT : 4 DAMP SAND SITE MIX OR 1 CEMENT : 6 ROADBASE, TAMPED IN 150 LAYERS.  
 b) N20/10/100 CONCRETE
10. WHERE THIS DIMENSION IS LESS THAN 25mm, RUN A 100mm HIGH FILLET OF POST HOLE BACK FILL MATERIAL ALONG THE BACK OF THE PLANK PRIOR TO BACKFILLING (TO PREVENT UNDERSPILL)
11. THIS SPECIFICATION TO BE USED IN CONJUNCTION WITH MANUFACTURER'S COMPONENT DETAIL SPECIFICATION.
12. ALL PANELS 40 THICK
13. POST LENGTH = D + H, UP TO 2700 MAX POST LENGTH
14. WALLS THAT HAVE BEEN DESIGNED TO WITHSTAND FENCE LOAD OVER, WILL BE ADEQUATE TO SUPPORT THE WIND LOADS IMPOSED BY 1800mm HIGH POST & RAIL FENCE, WITH MAX POST SPACING TO BE 2400mm; OR AN 1800mm HIGH EMBEDDED FENCE. (IN TERRAIN CATEGORY 3, WIND REGION A)
15. THE FENCING CONTRACTOR TO ENSURE THAT THE WIND LOADS IMPOSED BY THE FENCE WILL NOT ADVERSELY AFFECT THE PANELS OF RETAINING WALL. ALL LOAD OCCURS FROM THE FENCE POSTS TO BE DISTRIBUTED INTO RETAINING WALL POSTS.



**BUNBURY  
RETAINING  
WALLS**

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PROJECT :	FOR REFERENCE ONLY	
CLIENT :	FOR REFERENCE ONLY	
SCALE	1:20	APPROVED
DATE	N/A	