



**ATLAS**  
TILT SLAB

## MODULAR PRECAST PRE-STRESS CONCRETE CANTILEVER WALL SYSTEM



### Columns

Type	Wall Height (mm)	I Section (mm)	Front Flange (mm)	Hole Diameter (mm)	Weight/M (kg)
One	2000	300x340	2x75	475	200
Two	3000	300x475	2x75	600	315
Three	4000	370x660	2x75	800	500

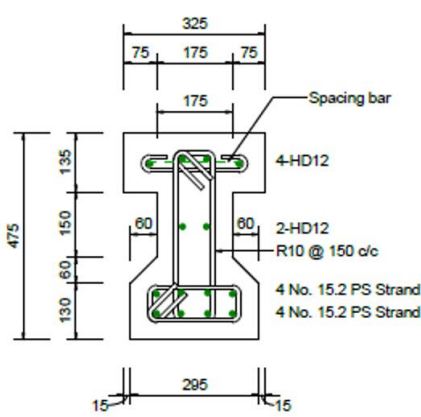
## Precast pre-stressed concrete planks:

1. Single plank for full wall height
2. 50MPa concrete with prestressing
3. No protection to concrete in contact with steel columns
4. 1600 mm C/C for steel columns and 1750-1800 mm C/C for precast column system
5. Normal use for marine environment
6. High erection rate with variable planks sizes. (1200mm/600mm/400mm/200mm/100mm)
7. Zero ends movement
8. Proved concrete resistance to weather and time
9. No losses

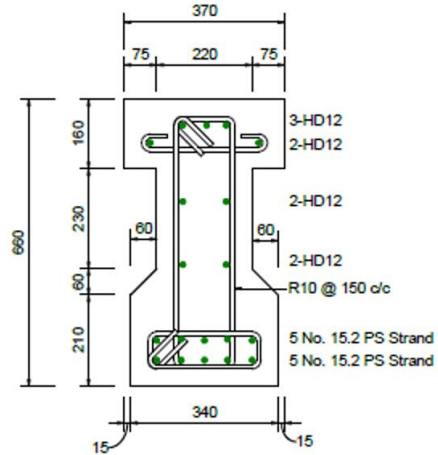
Planks					
Type	Depth mm	Thickness mm	C/c wall span mm	Plank length mm	Weight Kg
P100	100CAP	125	1800/1750	1540	56
P200	200	125	1800/1750	1540	115
P400	400	125	1800/1750	1540	230
P600	600	125	1800/1750	1540	345
P1200	1200	125	1800/1750	1540	700

- Atlas Tilt Slab product by licence from Retaining Wall Supplies Limited.
- 100 years lifespan for the system.
- Subject to Retaining Wall Supplies standard terms and conditions, available on request. Specifications are subject to change without notice. © Copyright 2021 all rights reserved.
- The system components (columns and planks) are strictly manufactured for use in building cantilever retaining walls designed by qualified engineers incorporating all site-specific design requirements.
- The retaining wall designers choose the suitable column type (1, 2, 3) versus the provided Serviceability Limit State (SLS) parameters as well as confirming that wall loading is suitable for the capacity of the horizontal planks as provided.
- New Zealand Patent No. 768993.

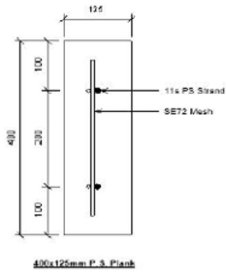
# Structural details



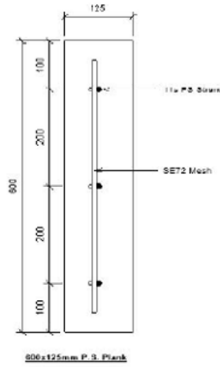
5 TYPE 2 PRESTRESSED PILE  
1 : 10



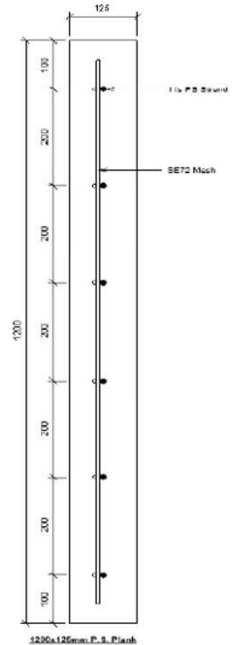
6 TYPE 3 PRESTRESSED PILE  
1 : 10



400x125mm P.S. Plank

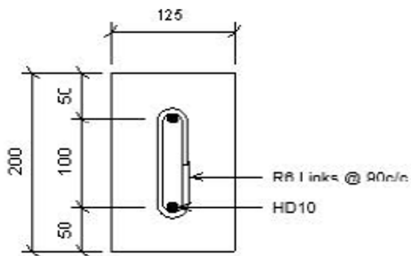


600x125mm P.S. Plank

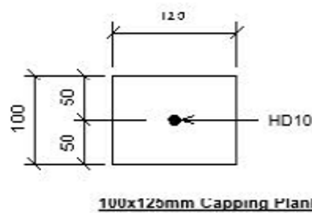


1200x125mm P.S. Plank

Planking Dimensions		PS Reinf. ( $f'c = 50\text{MPa}$ ) Jacking stress = 1100MPa (81.5kN/strand)			Transverse Reinf.	Maximum applied load (kPa)		
Depth	Thickness	Long Reinf.	$\text{\O Mn}$	$\text{\O Vn}$		1.2	1.5	1.8
400	125	2/ 11s	10	15	SE72 Mesh	62.5	50.0	41.7
600	125	3/ 11s	15	22.5				
1200	125	6/ 11s	30	45				

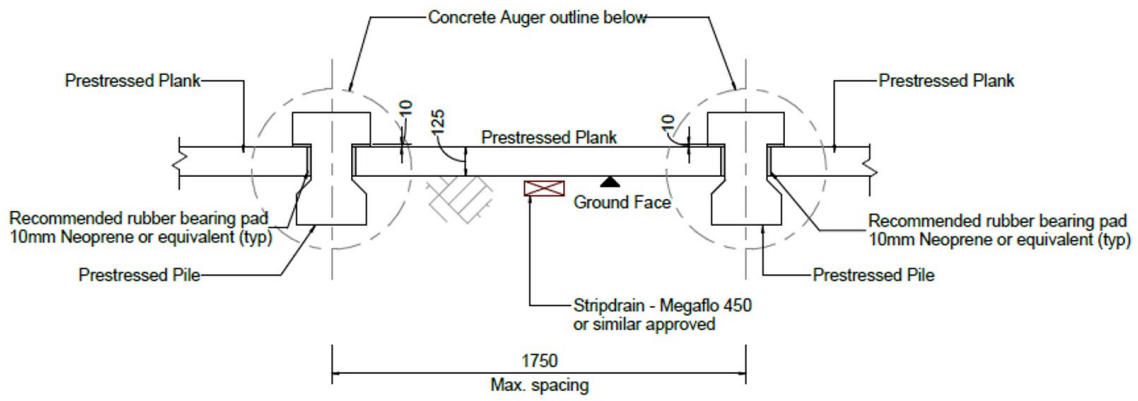


200x125mm Capping Plank

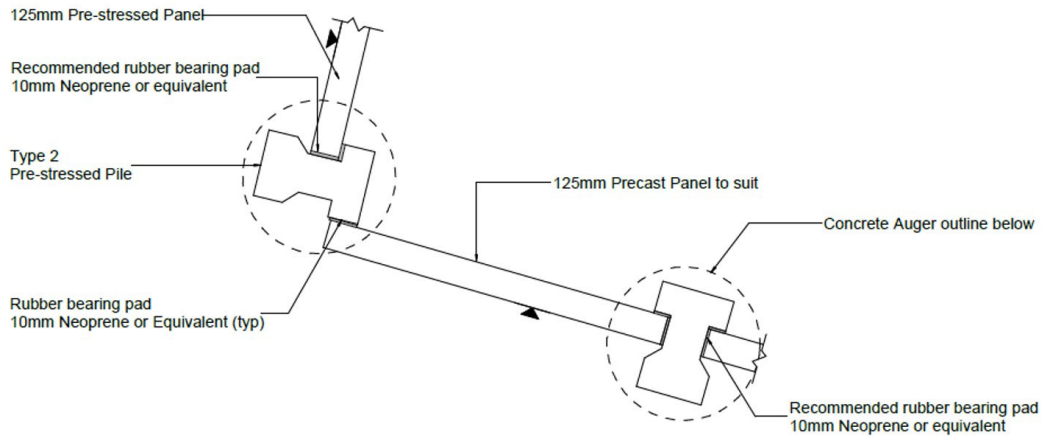


100x125mm Capping Plank

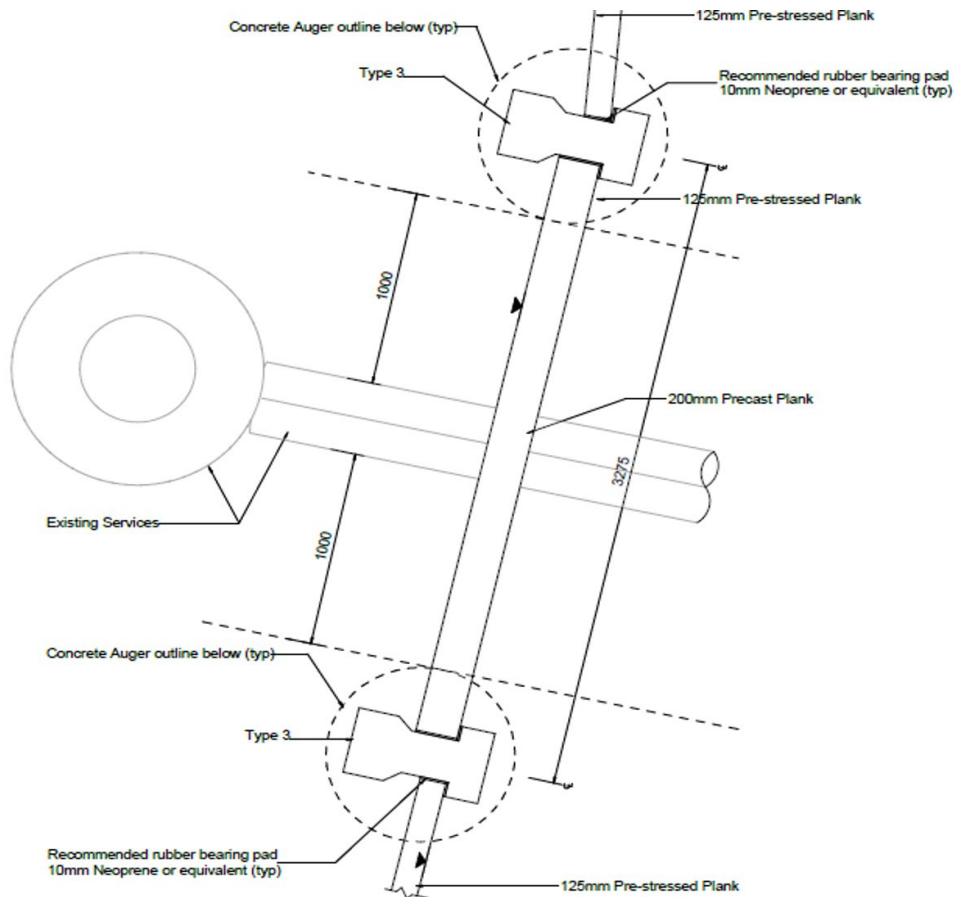
Planking Dimensions		Standard Reinf. ( $f'c = 50\text{MPa}$ )			Transverse Reinf.	Maximum UDL ( $\text{\O w}_{ult}$ ) for panel span in meters (kN/m /m)		
Depth	Thickness	Long Reinf.	$\text{\O Mn}$	$\text{\O Vn}$		SE72 Mesh	1.2	1.5
100	125	HD10	1.9	3.2	n/a	53.3	42.7	35.6
150	125	2 HD10	3.8	5	R6 @90c/c	55.6	44.4	37.0



## General arrangement/Spacing



## General arrangement/Corner



## General arrangement/Crossing