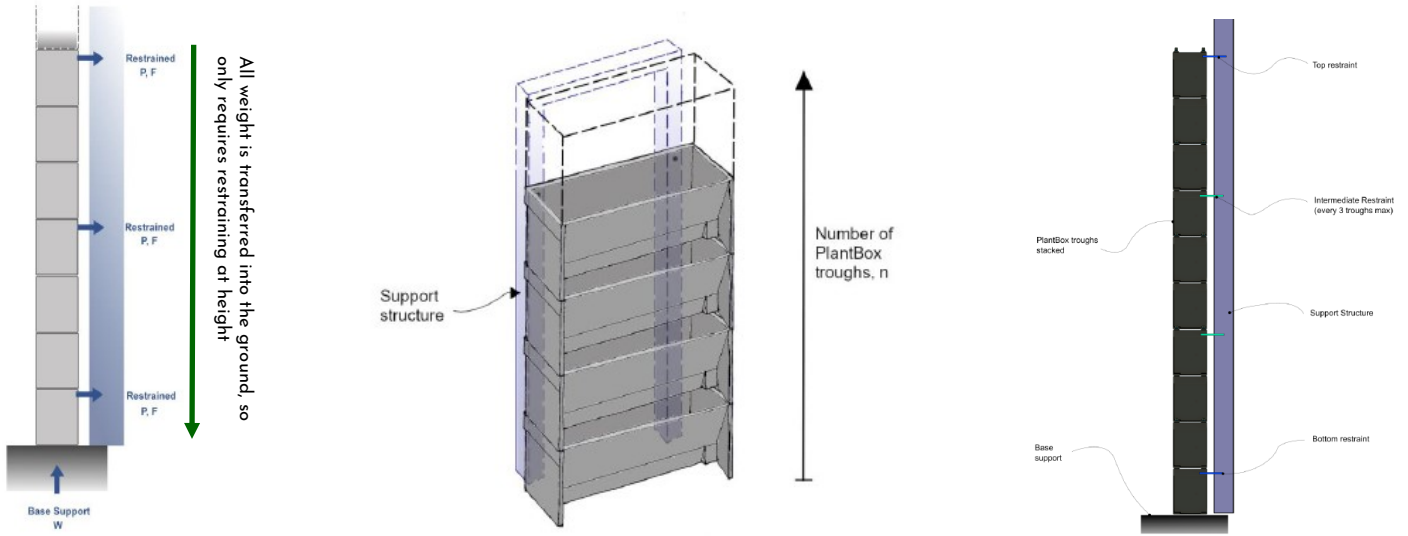




STRUCTURAL SUMMARY

PlantBox has been designed to be ground-bearing and only requiring restraining at height using the fixings below (or similar).



RESTRAINT FIXING OPTIONS

Brickwork, Blockwork and Timber

- 5.0mm Fischer SX Nylon Wall Plugs (Brickwork/Blockwork)
- 5.0mm A2 stainless steel Multipurpose Ultrascrew PZ

Note: Each of the above fixings has surpassed the 0.67kN of pull out force required for external applications up to 8M

Plasterboard

- 35mm Fischer GKM SK Metal Plasterboard Fixings
- 4.5mm A2 stainless steel wood screws

Note: Each Plasterboard fixing has surpassed the 0.09kN of pull out force required for internal applications up to 8M

Number of PlantBox troughs			1	2 to 10	11 to 20	21 to 30	31 to 40	
Max Base Weight, W (kN)			0.2	1.7	3.4	5.0	6.7	
			Max Restraint Load (kN)					
Applied Lateral Load (kN/m ²)	Internal	0.2	Pull-out, P	0.05	0.07	0.09	0.09	0.09
			Lateral Shear, F	0.01	0.02			
	External Sheltered	0.6	Pull-out, P	0.07	0.20	0.26	0.28	0.29
			Lateral Shear, F	0.02	0.05			
	External Exposed	0.8	Pull-out, P	0.10	0.29	0.35	0.37	0.38
			Lateral Shear, F	0.02	0.07			
		1	Pull-out, P	0.12	0.36	0.44	0.47	0.48
			Lateral Shear, F	0.03	0.09			
1.4	Pull-out, P	0.17	0.50	0.61	0.65	0.67		
	Lateral Shear, F	0.04	0.13					

Ref: EVOLVE Structural Assessment PlantBox

Note: The above fixings or equivalent are recommended by Biotechture to be in line with a full independent structural assessment. Both the pull out test results and a full independent EVOLVE Structural Assessment are available on request. If in doubt about specific project requirements, always seek further independent professional advice.