

RB

Concrete Retaining Wall

PERMACON



Installation Guide

VB
VAN BEEK'S
LANDSCAPE SUPPLY

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RB Wall

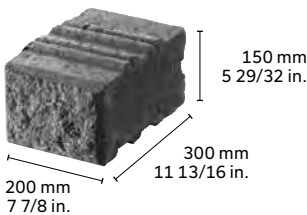
DESCRIPTION

RB wall comes complete with corner units and several coping options for straight walls.

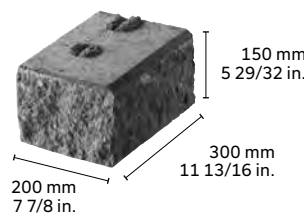
TIPS: Build vertical walls by knocking off the back half of each of the two ribs on top of the block using a hammer and chisel.

UNITS

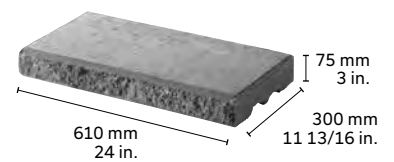
STANDARD UNIT



CORNER UNIT

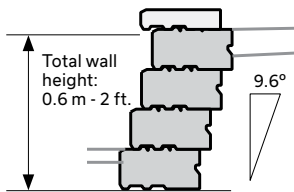


24 IN. CAPPING UNIT



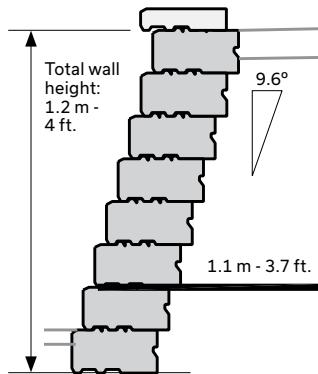
CROSS-SECTION

2 FOOT WALL HEIGHT



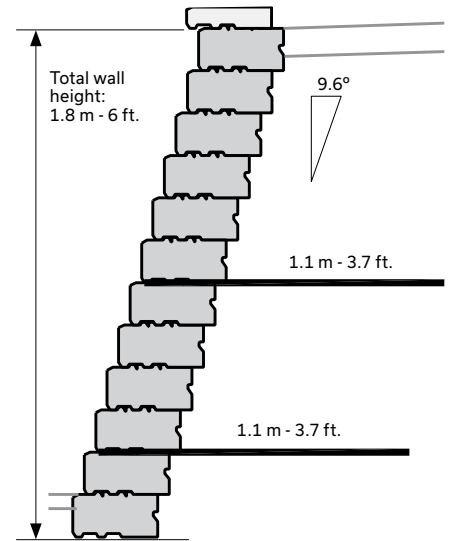
GRAVITY

4 FOOT WALL HEIGHT



GRID

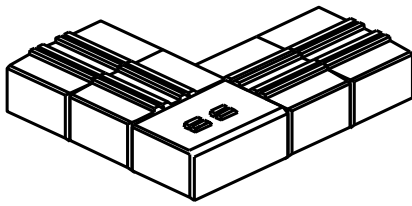
6 FOOT WALL HEIGHT



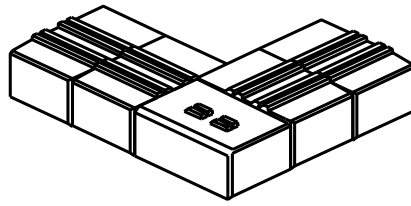
GRID

NOTES: 1 - Sample designs based on 2.4 kPa (50 psf) pedestrian surcharge. Use as preliminary design only when actual soil and surcharge conditions are conservatively represented by the standard engineering. In all cases, designs should be reviewed by a geotechnical engineer to ensure applicability to site. 2 - Designs consider free draining sand and gravel backfill material compacted to 95% SPMD to a minimum depth of 375 mm - 15 in. behind the wall or to full extent of geogrid reinforcement, whichever is greater. Backfill materials to have less than 8% passing through the # 200 sieve. 3 - Designs consider 19 mm - 0 to 3/4 in. well graded, crushed angular granular materials for a minimum depth of 200 mm - 8 in. under the wall compacted to 98% SPMD. Material to have less than 8% passing through the # 200 sieve. 4 - Designs consider minimum bearing capacity in subgrade soil below wall of 150 kPa (3000 psf). 5 - Different batter configurations, surcharge conditions or wall heights require different design configurations. 6 - No provision has been made for overall global stability of the designs. 7 - Minimum 100 mm - 4 in. of product must be buried in all situations. Design may require more depending on soil conditions or toe slope. 8 - Grid lengths are measured from front face of wall. 9 - Geogrid used in designs is Miragrid 2XT or 3XT. 10 - Designs for wall heights, batters and surcharges not represented on these pages can be obtained from Permacon. 11 - Refer to standard engineering drawings for further details. 12 - Total wall height for Permacon RB Wall does not include coping unit. 13 - Sample designs are not designed for handrail, guard or fence loading. In these cases, design modifications will be required. 14 - Poor soil conditions and excessive moisture will require drainage and design modifications.

CORNER - SINGLE DEPTH



ROW A



ROW B

STEPS

Risers are built using RB standard units with 24 in. coping unit as treads.

TO CALCULATE PRODUCT REQUIREMENTS:
Standard units = step width x 1.5 x # of risers + step width x 1.5
Coping units = step width ÷ by coping width x 1.5 x # of risers

