



PARAPET WALL SAMPLE CALCULATION

Overturning factor of safety
 $FSot = Mr / Mo > 1.50$

RECON CAPSTONE = 550 lbs (4 ft wide) or 138 plf
 RECON FREESTANDING BLOCK = 1448 lbs (4 ft wide) or 362 plf
 RECON 24M BLOCK = 1536 lbs (4 ft wide) or 384 plf

Wind Load = 15 psf x 54.5 in x (1 ft / 12 in) = 68 plf
 Post Load = 50 plf (IBC)

Check Overturning over a 1 foot length of wall.

Resisting Moment = $(138 \text{ lb} \times 12" + 3 \times 362 \text{ lb} \times 12" + 1 \times 384 \text{ lb} \times 12") \times (1 \text{ ft} / 12 \text{ in}) = 1608 \text{ lb-ft}$

Overturning Moment = $[68 \text{ lb} \times (22.5 \text{ in} + 16 \text{ in}) + 50 \text{ lb} \times (42 \text{ in} + 16 \text{ in})] \times (1 \text{ ft} / 12 \text{ in}) = 460 \text{ lb-ft}$

$FSot = Mr / Mo = 1608 \text{ lb-ft} / 460 \text{ lb-ft} = 3.50 > 1.50 \text{ OK}$

© Copyright 2022 Recon Wall Systems, Inc. All Rights Reserved

Disclaimer: This drawing has been prepared by Recon Wall Systems, Inc. and to the best of its knowledge, accurately represents the product use in the application that it is illustrated. This drawing is intended for conceptual purposes only. Anyone making use of this drawing does so at their own risk and assumes all liability for such use. Final design for construction purposes must be completed by a Registered Professional Engineer who is familiar with the product and who has taken into account specific site conditions.



RECON PARAPET WALLS

RECON WALL SYSTEMS, INC.
 11521 EAGLE STREET, SUITE #3
 COON RAPIDS, MN 55448
 952-922-0027
 www.reconwalls.com

**DRAWING
 #TS6**