LARGE BATTER WALLS

9” (230 MM) SETBACK WALLS

IMPORTANT NOTICE

The design specifications for Redi-Rock® blocks suggest maximum installation heights under certain assumed conditions. These wall heights were calculated using the assumed material properties and loading conditions in the *Design Resource Manual* and will vary from location to location depending on the soil properties and terrain. Since soil conditions and topography vary greatly from site to site, an engineering analysis must be performed for each wall installation.

Because Redi-Rock International does not build the blocks or install the wall system, Redi-Rock International does not assume any responsibility regarding structural stability of any particular block or particular wall system. In addition, Redi-Rock International assumes no responsibility in connection with any injury, death, or property damage claim whatsoever whether asserted against a Leasee, Leasor, Purchaser or others, arising out of or attributable to the operation of or products produced with Redi-Rock International equipment.

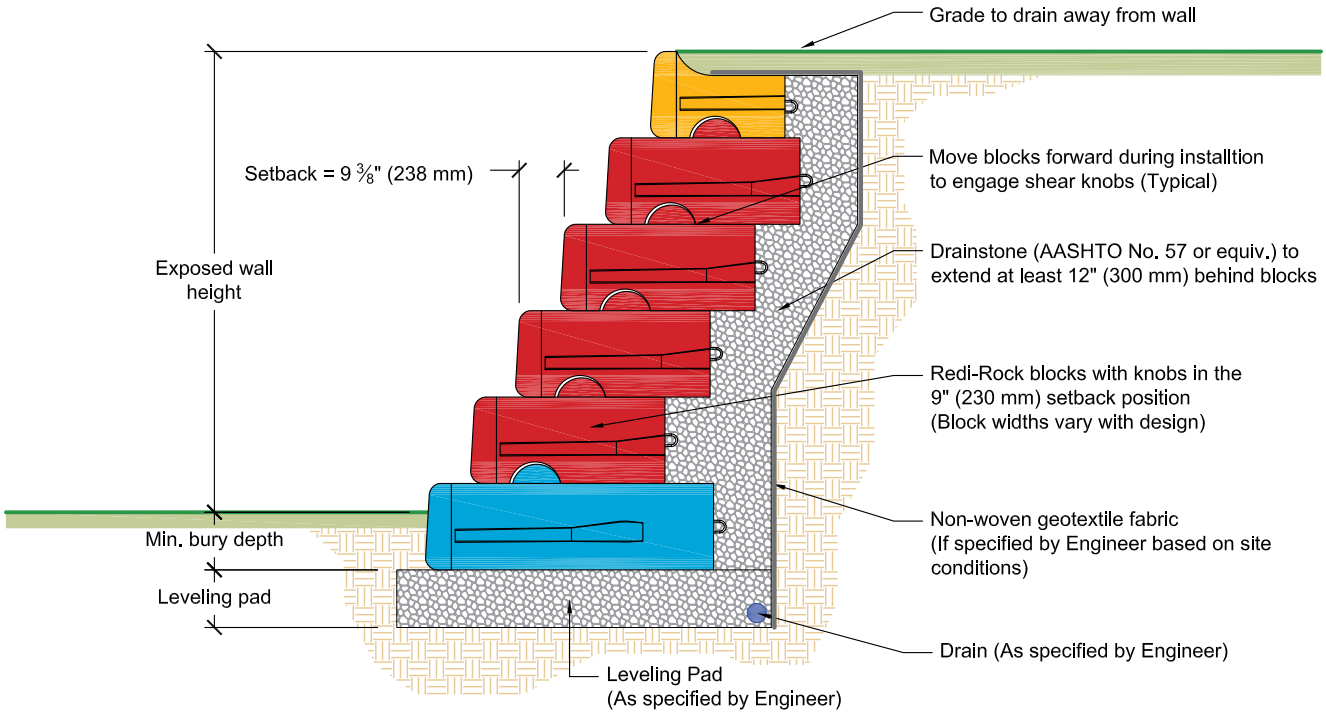
9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

Preliminary Height Guide

This preliminary height guide has been prepared showing Redi-Rock walls in a variety of assumed conditions. It is intended to give the specifier an idea of what block types are required and what heights are achievable with Redi-Rock in different applications. A combination of Redi-Rock 28" (710 mm), 41" (1030 mm), and 60" (1520 mm) wide blocks with knobs in the 9" (230 mm) setback position are used to provide the most efficient cross-section available in the different conditions.

Several assumptions have been made in preparation of the guide. They are listed in the notes below. If these assumptions do not match the wall section under consideration, block selections and achievable heights may vary from the sections shown in this guide. All wall sections for construction must be designed by a registered Professional Engineer using the actual conditions of the site.



Notes:

This preliminary guide has been prepared for three different soil types and three different load conditions to give an indication of the performance of Redi-Rock walls. **Redi-Rock walls are not limited to these conditions.** Specific wall sections can be designed for different soil and loading conditions.

Unit weight of soil is assumed to be 120 lb/ft^3 (18.85 kN/m^3) or 130 lb/ft^3 (20.4 kN/m^3) as noted for each section of this preliminary guide.

Minimum factors of safety are 1.5 for sliding, 1.5 for overturning, 2.0 for bearing capacity, and 1.3 for global stability. Other factors of safety will result in changes from the wall heights and block selections shown in this guide.

No seismic or hydrostatic loads were included in this preliminary guide.

Ledgestone texture blocks were used to prepare this preliminary guide. Achievable wall heights and block selections for other textures may vary.

Independent barrier design at the top of the wall must be performed for site-specific conditions. Barrier requirements may result in changes to available wall heights and block selections from those shown in this guide.

Wall stability needs to be verified in the final design for site specific conditions.

The wall design shall address both internal and external drainage and shall be evaluated by the Professional Engineer who is responsible for the final wall design.

Backfill material to be compacted to 90% modified proctor density (ASTM D1557).

All Redi-Rock International Wall System Specifications and installation recommendations should be followed.

Construction oversight should be provided on all walls to ensure proper construction according to your detailed design drawings.

Not tall enough? Greater wall heights are achievable with select backfill and/or mechanically stabilized earth Redi-Rock walls.

Redi-Rock products are manufactured by independently owned, licensed manufacturers. Product offerings will vary between manufacturers. Contact your local manufacturer to determine what products are available for your job.

These block selection and height guides were prepared by Redi-Rock International for estimating and conceptual design purposes only. All information is believed to be true and accurate; however, Redi-Rock International assumes no responsibility for the use of these preliminary guides for actual construction. Determination of the suitability of each preliminary guide is the sole responsibility of the user. **Final designs for construction purposes must be performed by a registered Professional Engineer, using the actual conditions of the proposed site.**

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

Preliminary Height Guide

$\phi = 34°$ | DENSE WELL-GRADED SAND or SAND AND GRAVEL	
Large batter gravity walls	SECTION 1 OF 3
Assumed retained and foundation soils for this Section	SW, GW
Internal angle of friction	$\phi = 34°$
Unit weight	γ = 130 lb / ft^3 (20.4 kN / m^3)
Cohesion	c = 0 lb / ft^2 (0 kPa)

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

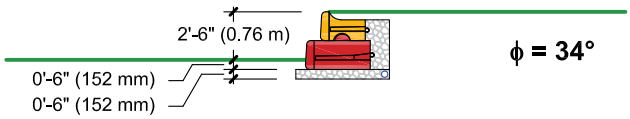
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION A | NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

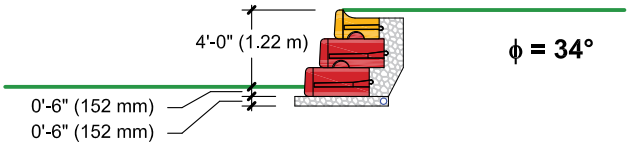
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



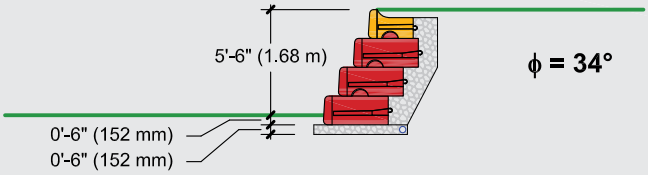
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



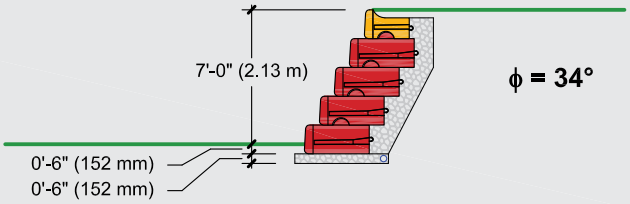
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



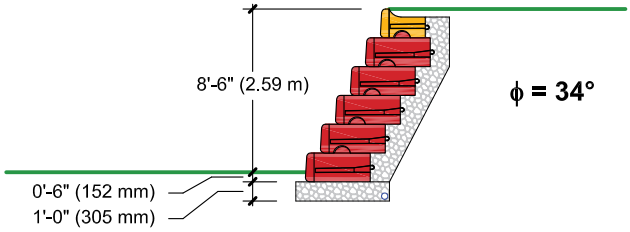
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks



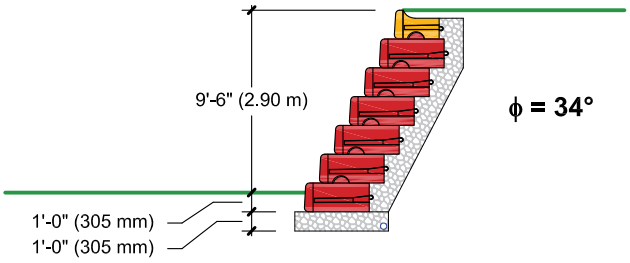
6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks



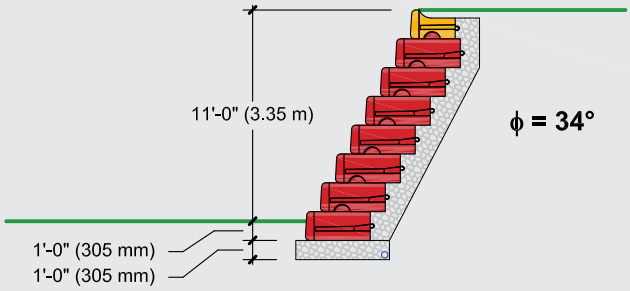
7 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(6) 41" (1030 mm) Blocks



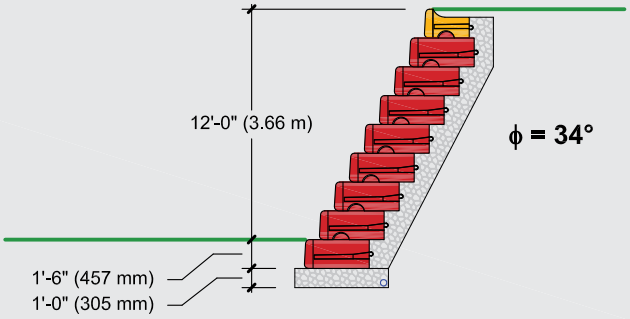
8 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(7) 41" (1030 mm) Blocks



9 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(8) 41" (1030 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

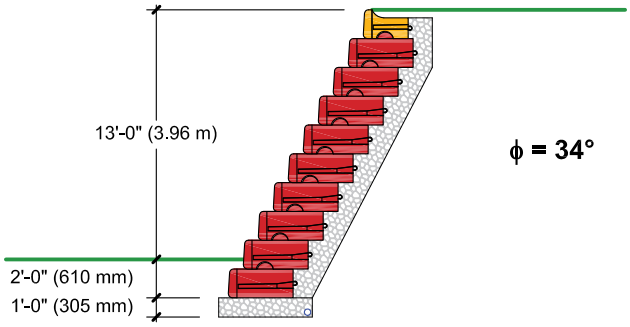
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION A | NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

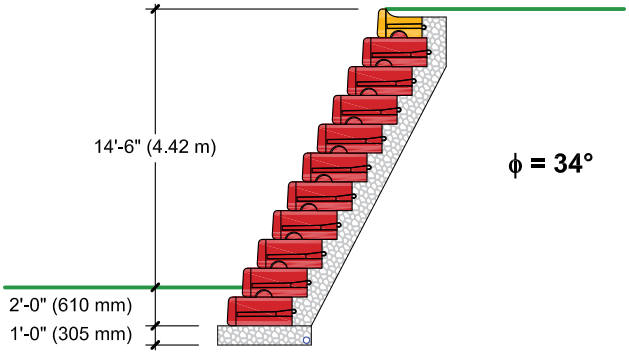
10 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(9) 41" (1030 mm) Blocks



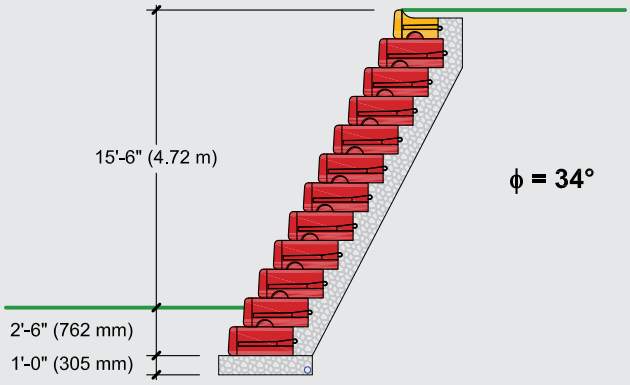
11 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(10) 41" (1030 mm) Blocks



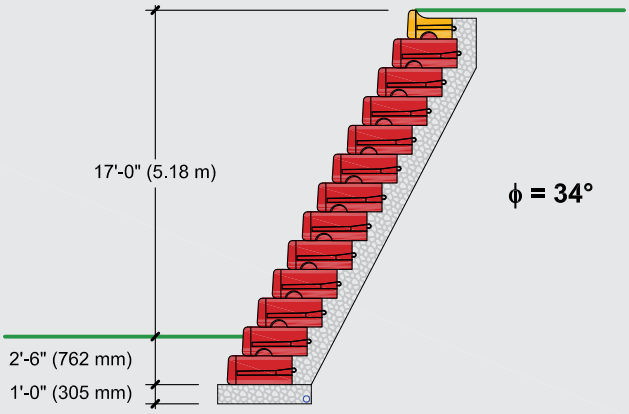
12 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(11) 41" (1030 mm) Blocks



13 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(12) 41" (1030 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

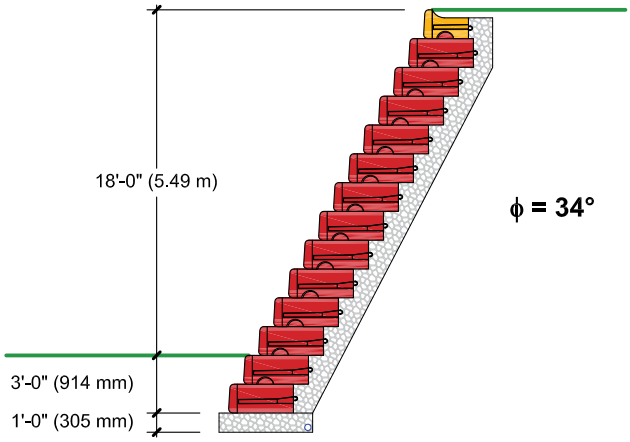
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION A | NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

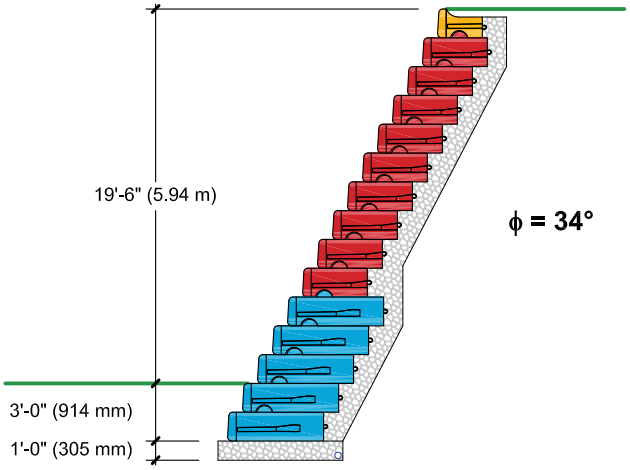
14 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(13) 41" (1030 mm) Blocks



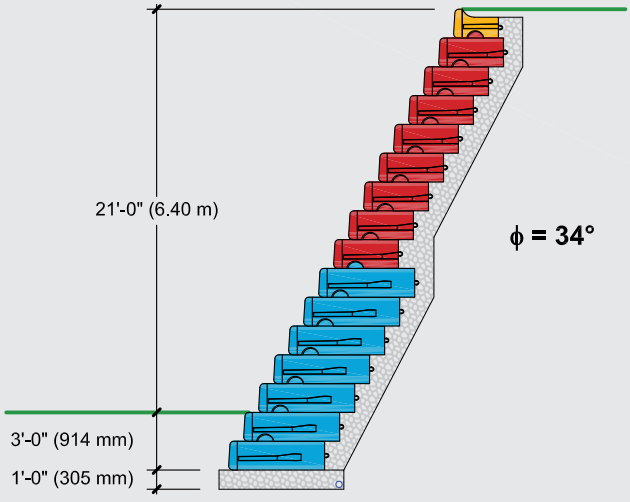
15 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(9) 41" (1030 mm) Blocks
(5) 60" (1520 mm) Blocks



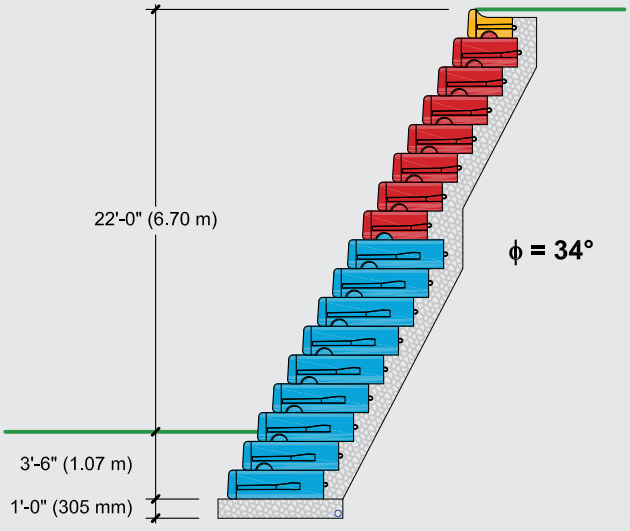
16 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(8) 41" (1030 mm) Blocks
(7) 60" (1520 mm) Blocks



17 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(7) 41" (1030 mm) Blocks
(9) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

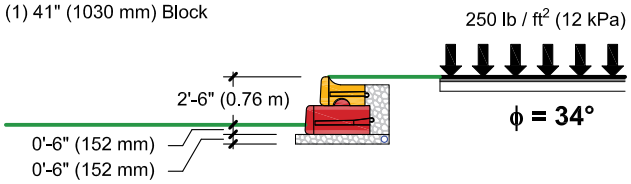
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION B | 250 lb/ft^2 (12 kPa) LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

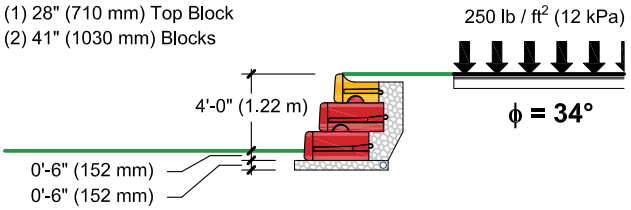
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



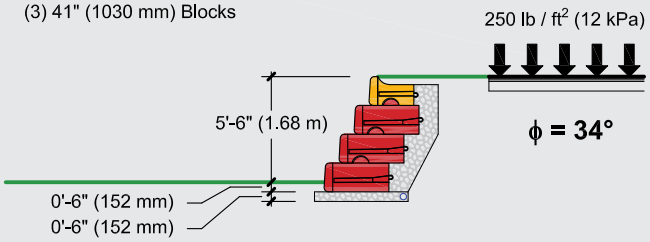
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



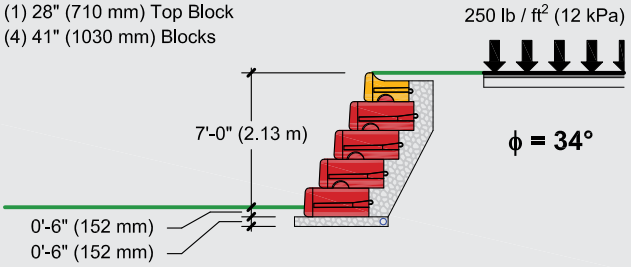
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



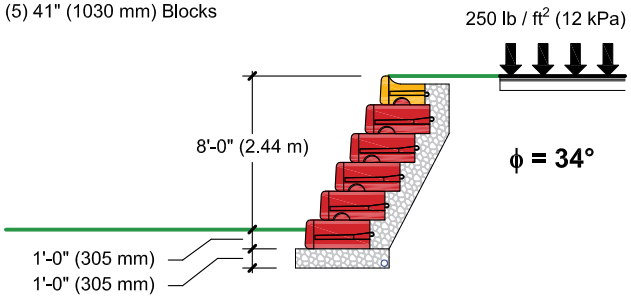
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks



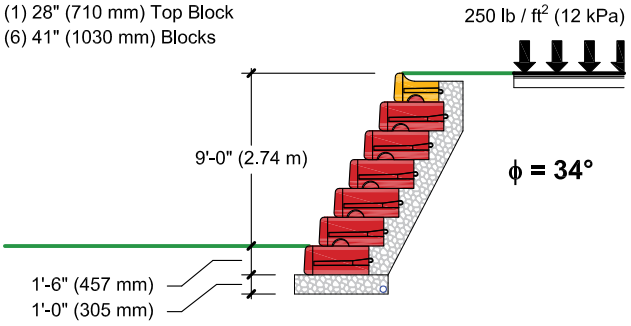
6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks



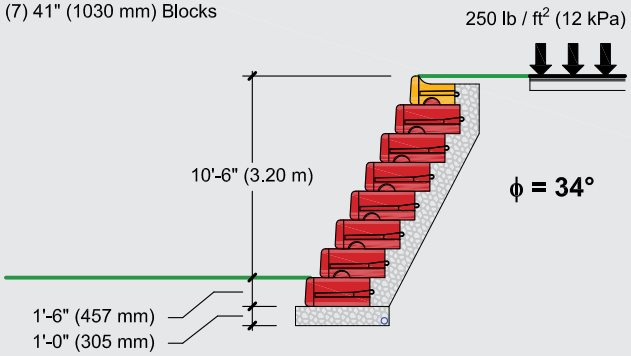
7 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(6) 41" (1030 mm) Blocks



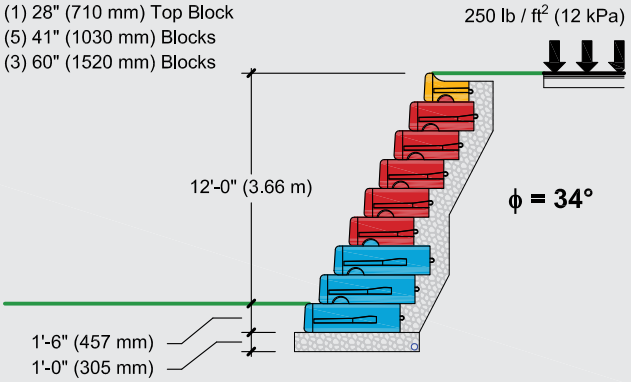
8 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(7) 41" (1030 mm) Blocks



9 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks
(3) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

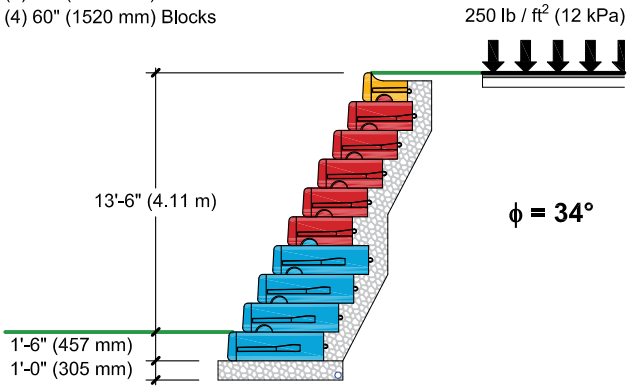
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION B | 250 lb/ft^2 (12 kPa) LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

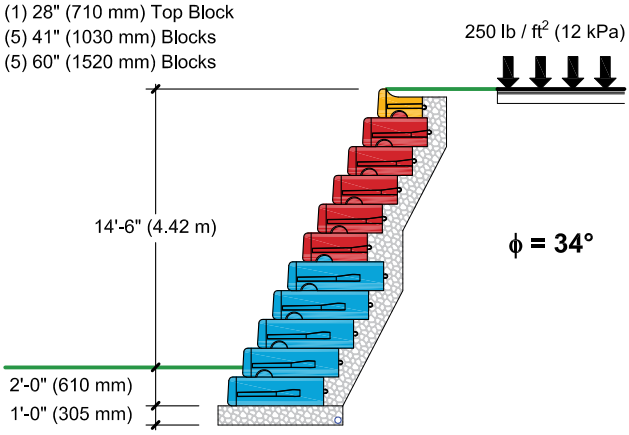
10 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks
(4) 60" (1520 mm) Blocks



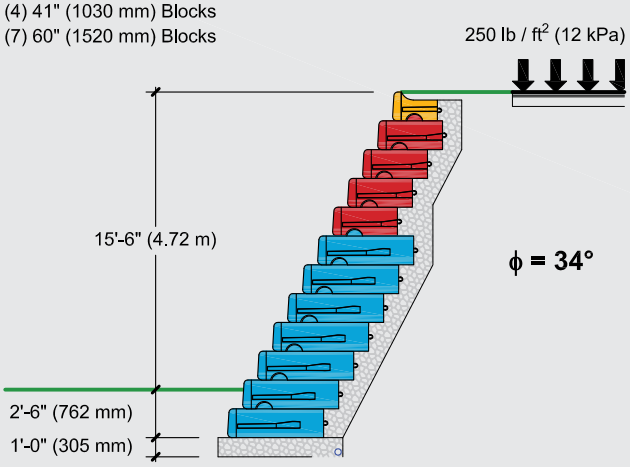
11 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks
(5) 60" (1520 mm) Blocks



12 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks
(7) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

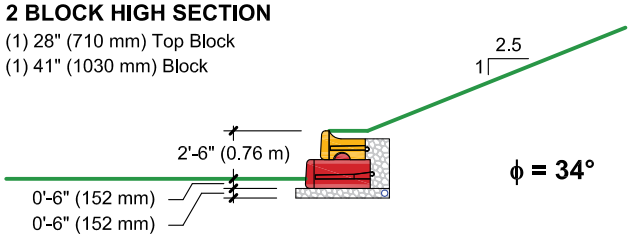
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION C | 1 : 2.5 BACK SLOPE, NO TOE SLOPE, NO LIVE LOAD SURCHARGE

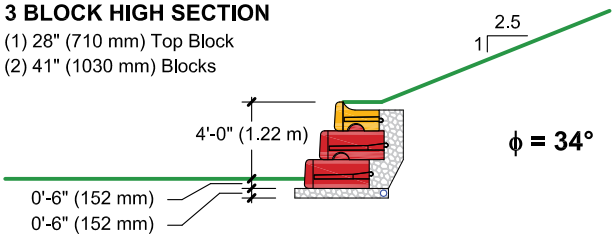
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



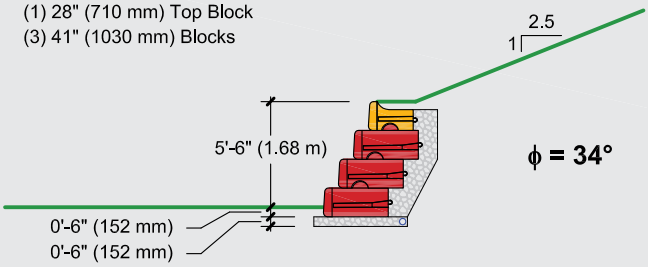
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



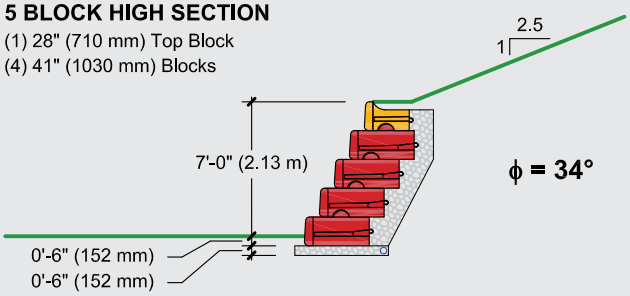
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



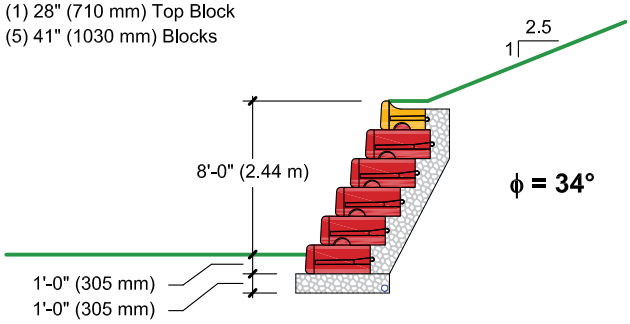
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks



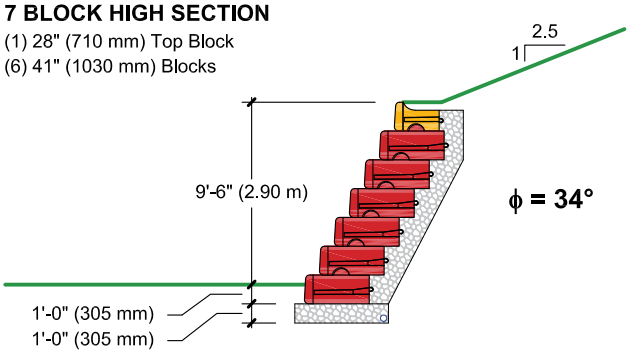
6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks



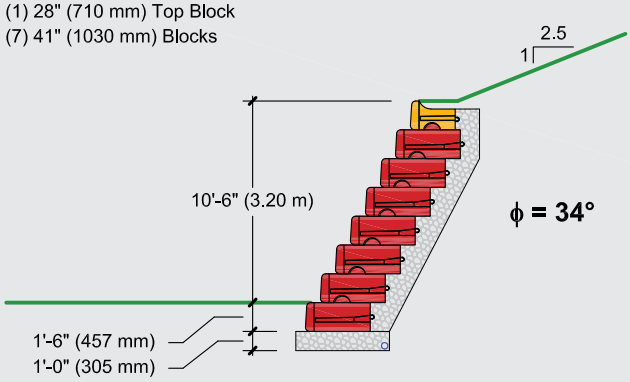
7 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(6) 41" (1030 mm) Blocks



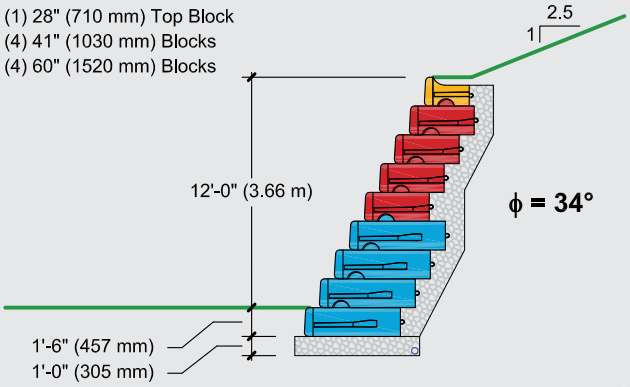
8 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(7) 41" (1030 mm) Blocks



9 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks
(4) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

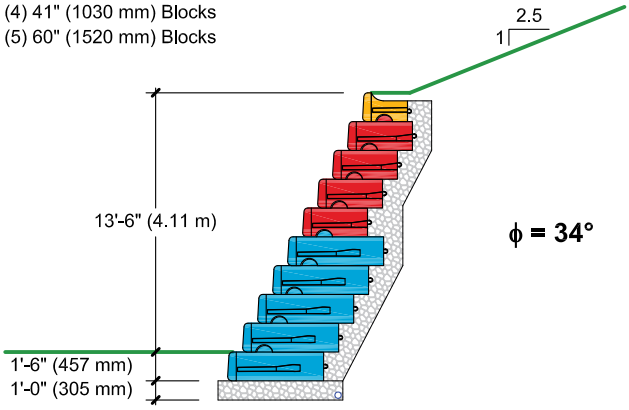
Preliminary Height Guide

ϕ = 34° | DENSE WELL-GRADED SAND or SAND AND GRAVEL

LOAD CONDITION C | 1 : 2.5 BACK SLOPE, NO TOE SLOPE, NO LIVE LOAD SURCHARGE

10 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks
(5) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

Preliminary Height Guide

$\phi = 30°$ | FINE TO MEDIUM SAND or SILTY SAND	
Large batter gravity walls	SECTION 2 OF 3
Assumed retained and foundation soils for this Section	SW, SP, SM
Internal angle of friction	$\phi = 30°$
Unit weight	$\gamma = 120$ lb / ft^3 (18.8 kN / m^3)
Cohesion	c = 0 lb / ft^2 (0 kPa)

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

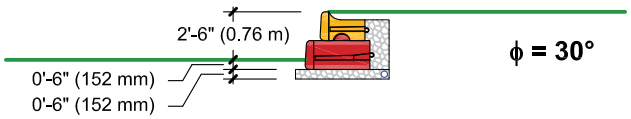
Preliminary Height Guide

ϕ = 30° | FINE TO MEDIUM SAND or SILTY SAND

LOAD CONDITION A | NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

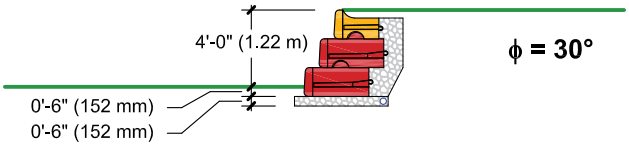
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



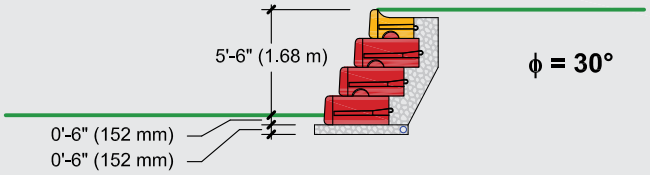
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



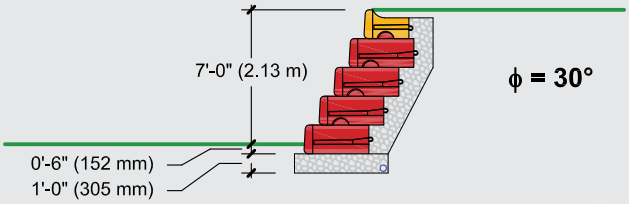
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



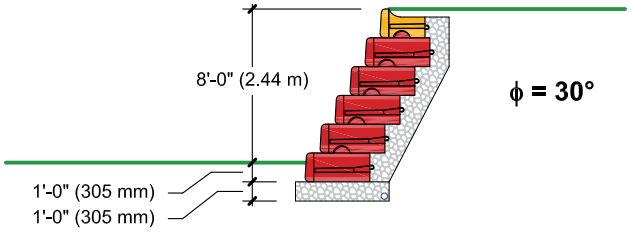
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks



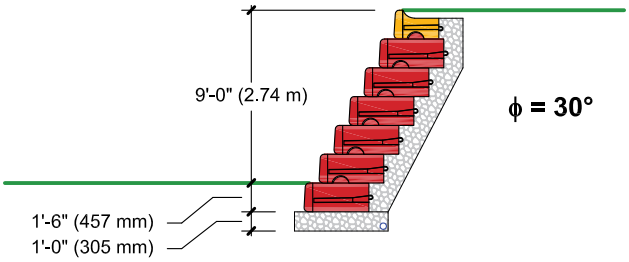
6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks



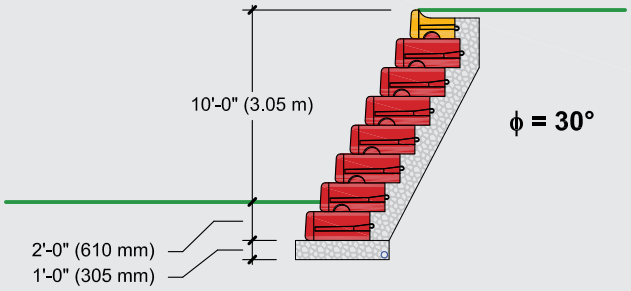
7 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(6) 41" (1030 mm) Blocks



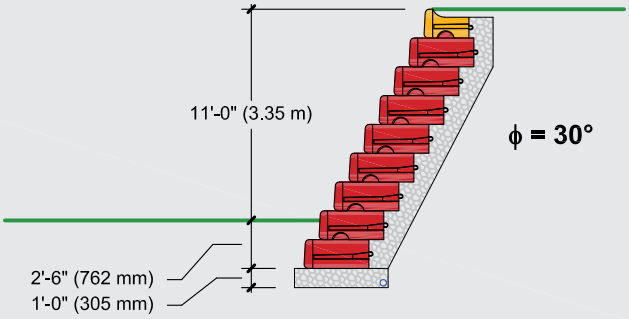
8 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(7) 41" (1030 mm) Blocks



9 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(8) 41" (1030 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

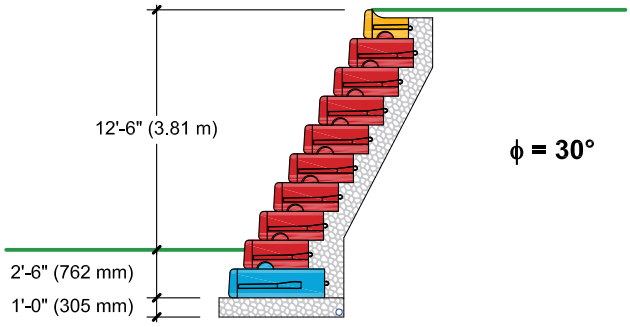
Preliminary Height Guide

ϕ = 30° | FINE TO MEDIUM SAND or SILTY SAND

LOAD CONDITION A | NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

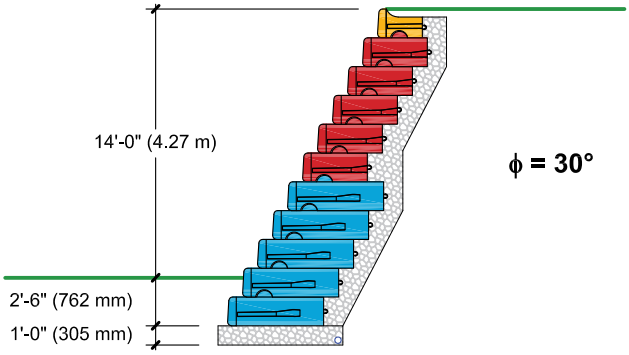
10 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(8) 41" (1030 mm) Blocks
(1) 60" (1520 mm) Block



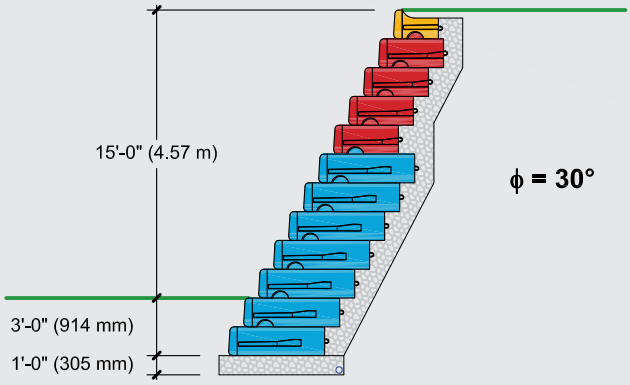
11 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks
(5) 60" (1520 mm) Block



12 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks
(7) 60" (1520 mm) Block



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

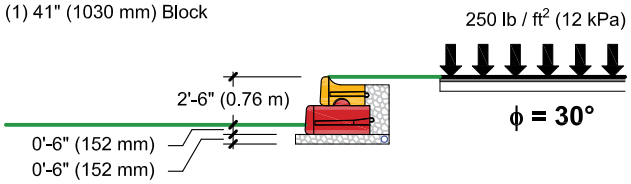
Preliminary Height Guide

ϕ = 30° | FINE TO MEDIUM SAND or SILTY SAND

LOAD CONDITION B | 250 lb/ft^2 (12 kPa) LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

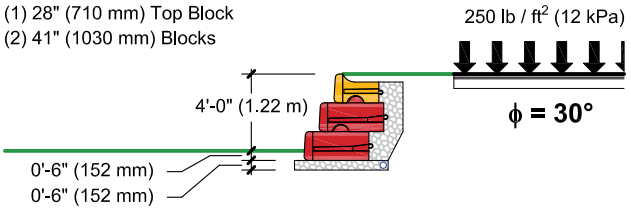
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



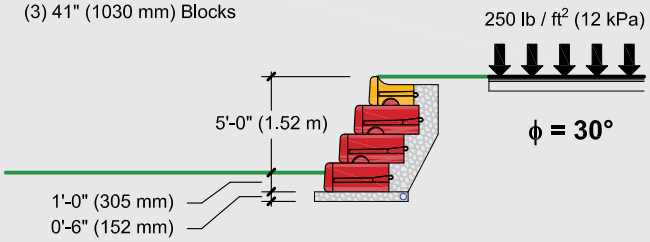
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



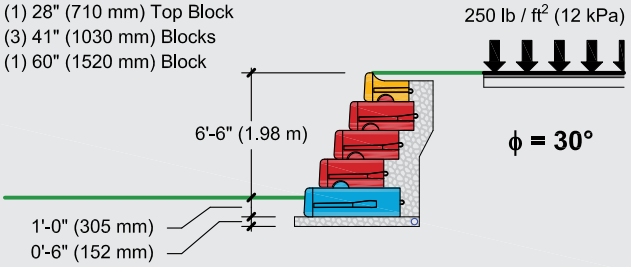
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



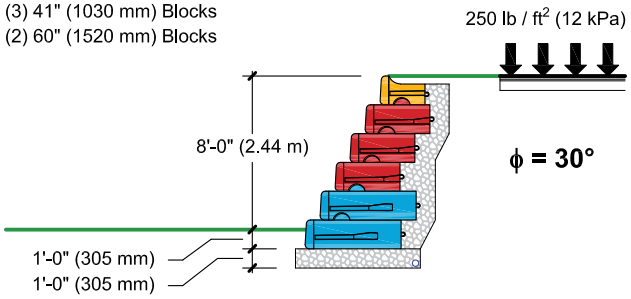
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks
(1) 60" (1520 mm) Block



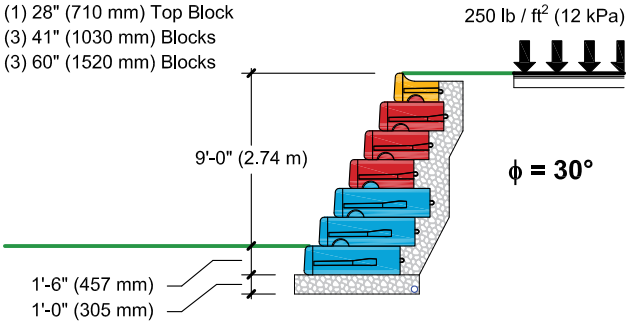
6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks
(2) 60" (1520 mm) Blocks



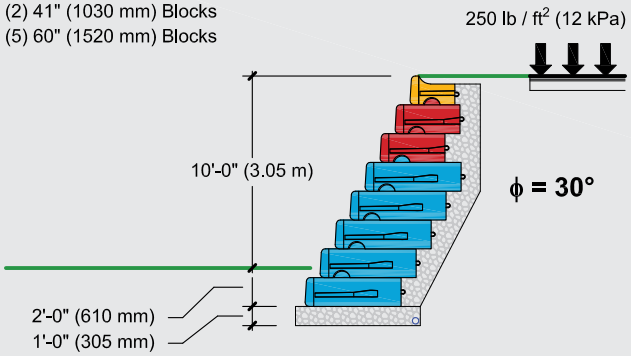
7 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks
(3) 60" (1520 mm) Blocks



8 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks
(5) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

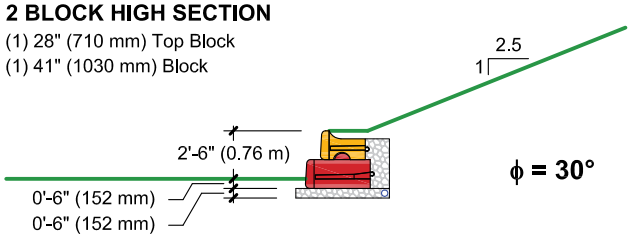
Preliminary Height Guide

ϕ = 30° | FINE TO MEDIUM SAND or SILTY SAND

LOAD CONDITION C | 1 : 2.5 BACK SLOPE, NO TOE SLOPE, NO LIVE LOAD SURCHARGE

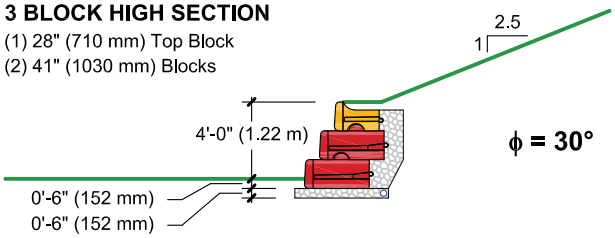
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



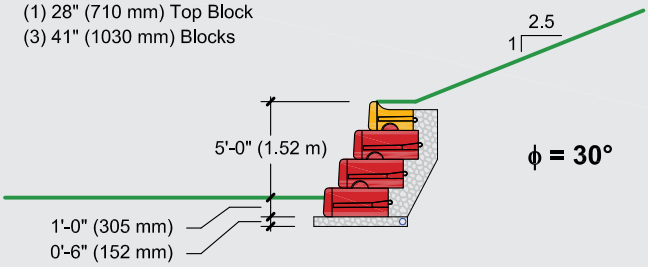
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



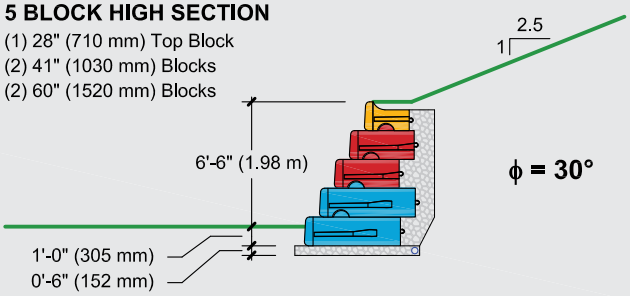
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



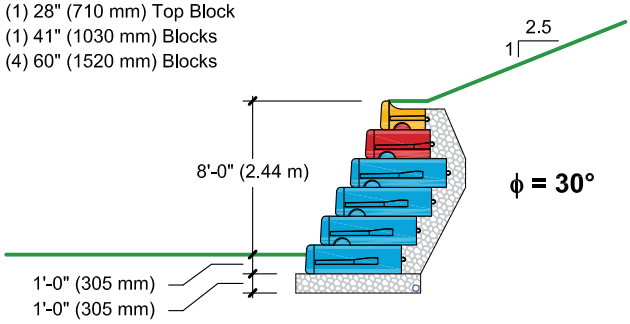
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks
(2) 60" (1520 mm) Blocks



6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Blocks
(4) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

Preliminary Height Guide

$\phi = 28°$ | SILTY SAND or CLAYEY SAND	
Large batter gravity walls	SECTION 3 OF 3
Assumed retained and foundation soils for this Section	SM, SC
Internal angle of friction	$\phi = 28°$
Unit weight	$\gamma = 120$ lb / ft^3 (18.8 kN / m^3)
Cohesion	c = 0 lb / ft^2 (0 kPa)

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

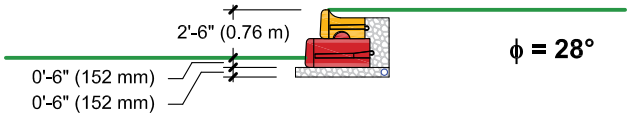
Preliminary Height Guide

ϕ = 28° | SILTY SAND or CLAYEY SAND

LOAD CONDITION A | NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

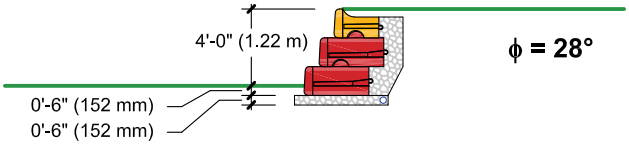
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



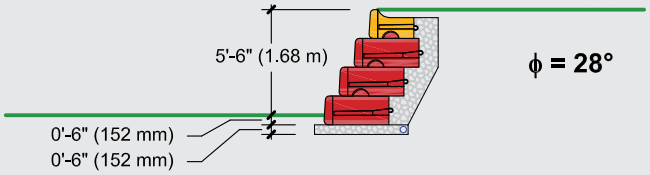
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



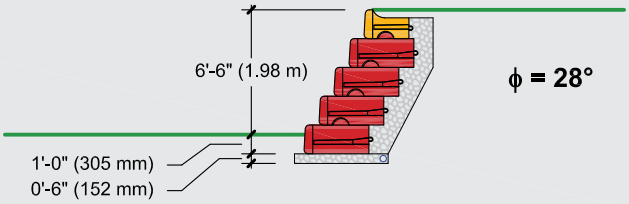
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks



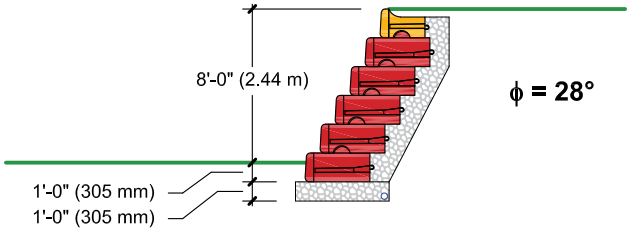
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks



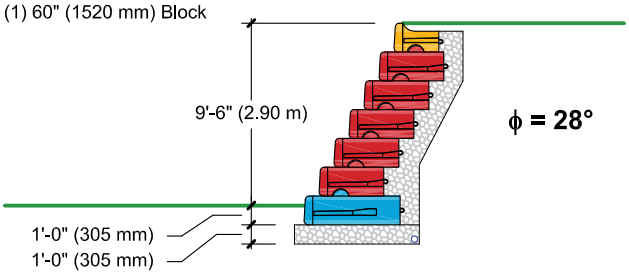
6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks



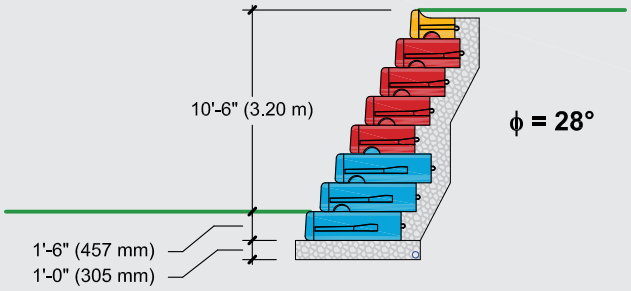
7 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(5) 41" (1030 mm) Blocks
(1) 60" (1520 mm) Block



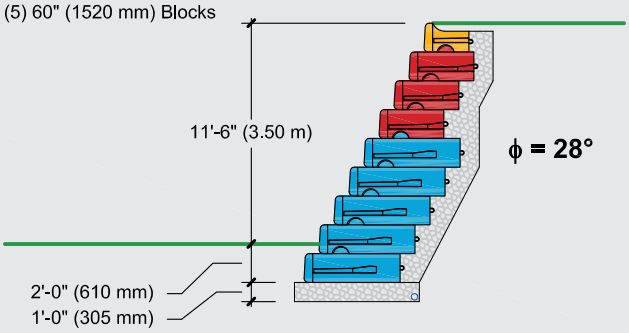
8 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(4) 41" (1030 mm) Blocks
(3) 60" (1520 mm) Blocks



9 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 41" (1030 mm) Blocks
(5) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

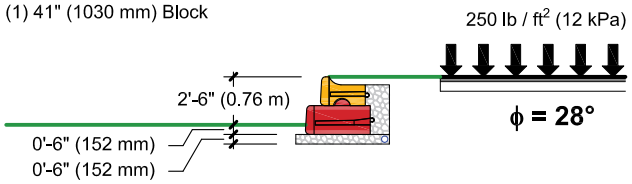
Preliminary Height Guide

ϕ = 28° | SILTY SAND or CLAYEY SAND

LOAD CONDITION B | 250 lb/ft^2 (12 kPa) LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

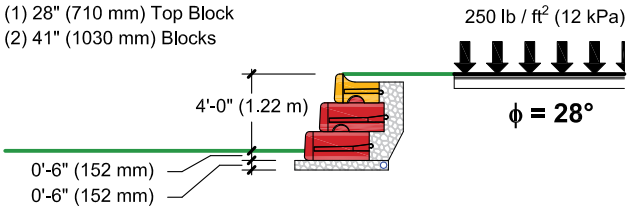
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



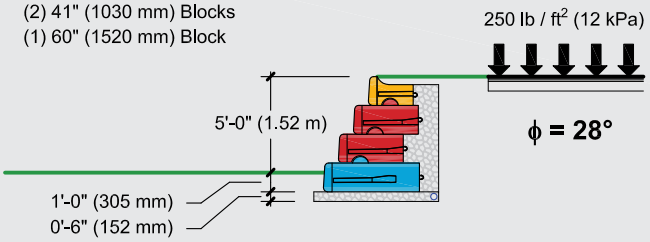
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks



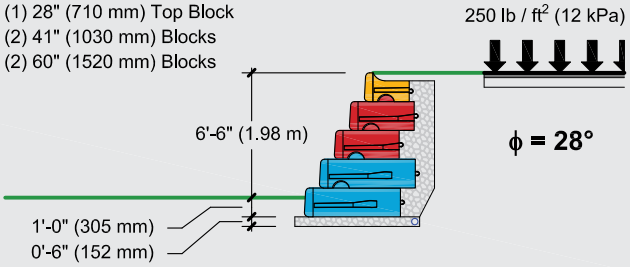
4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks
(1) 60" (1520 mm) Block



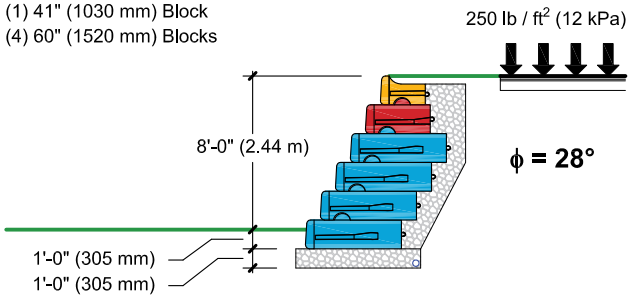
5 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(2) 41" (1030 mm) Blocks
(2) 60" (1520 mm) Blocks



6 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block
(4) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

9" (230 mm) SETBACK WALLS

ALLOWABLE STRESS DESIGN

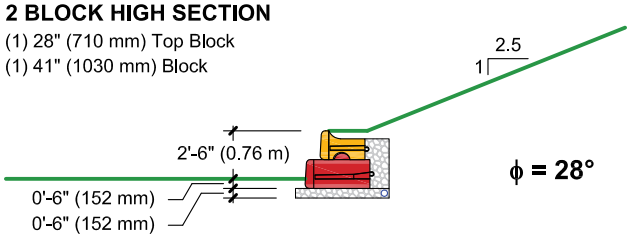
Preliminary Height Guide

ϕ = 28° | SILTY SAND or CLAYEY SAND

LOAD CONDITION C | 1 : 2.5 BACK SLOPE, NO TOE SLOPE, NO LIVE LOAD SURCHARGE

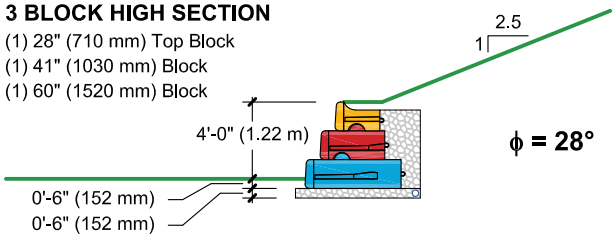
2 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block



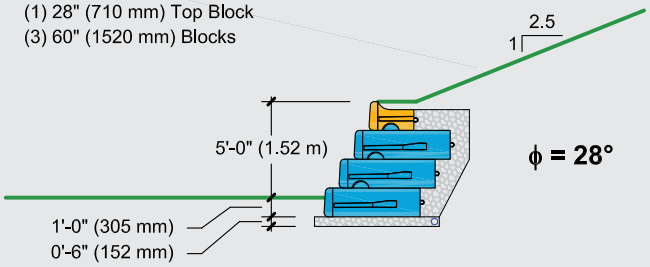
3 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(1) 41" (1030 mm) Block
(1) 60" (1520 mm) Block



4 BLOCK HIGH SECTION

(1) 28" (710 mm) Top Block
(3) 60" (1520 mm) Blocks



Legend:

= 28" (710mm) BLOCK

= 41" (1030 mm) BLOCK

= 60" (1520 mm) BLOCK

SEE NOTES AND RECOMMENDED DETAILS AT START OF PRELIMINARY HEIGHT GUIDE.

Project: Residential Erosion Protection ***Block Manufacturer:*** MDC Contracting, LLC ***Engineer:*** Benchmark Engineering ***Installer:*** Harbor Springs Excavating ***Location:*** Harbor Springs, Michigan ***Completed:*** 2008