When bringing a project from idea to reality, careful planning at the early stages goes a long way toward minimizing costs, repairs and other project setbacks. Proper consideration of construction site features, obstacles and constraints is essential for a cost-effective design and will influence the final product.

UNREINFORCED HEIGHT LIMITS FOR THE LONDONBOULDER 42" BLOCK

Assumptions related to engineering:

- No surcharge or back slope present
- Soil unit weight of 120 pcf
- Minimum 1' embedment
- Backfill compacted to minimum 95% of the standard Proctor maximum dry density.
- Safety factors: 1.5 against sliding; 2.0 against overturning
- Heights apply only to soil type with indicated friction angles
- Construction follows adequate industry practice

The following chart represents height limits related to vertical or setback walls constructed in soil with varying degrees of friction angles. Chart does not include checks for global stability or presence of water.

SOIL	NO SETBACK	2" SETBACK	6" SETBACK
φ = 26°	7.5'	10.5'	12'
φ = 28°	7.5'	10.5'	12'
φ = 30°	9.0'	12'	13.5'
φ = 32°	9.0'	12'	13.5'
φ = 34°	10.5'	13.5'	15'

This chart is for estimating tasks and reference only.
It is the user's responsibility to ensure that a final, project-specific design is reviewed, approved, and certified by a registered Professional Engineer, based on actual soil conditions. It is the project owner's responsibility to ensure the adequacy of the designed retaining wall incorporated into the overall project through a specification. The specification should include factors which affect the overall integrity of the retaining wall such as location, interaction with other project components, and engineering aspects including but not limited to site soil bearing capacity, global slope stability, presence of underground or surface water, etc. Specification of excavation, trenching or any other construction procedures and corresponding safety specifications are the responsibility of the installer, who shall adhere to sound industry practice and provide additional support during construction if needed.



Retaining Wall, LimeStone Face

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PRODUCT
London Boulder

DRAWING
Design Considerations: Unreinforced Height Limits

WEIGHT

DRAWING NO.

DATE
As per drawing

SHEET
04 of 14

UNITS / SCALE
As per drawing

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