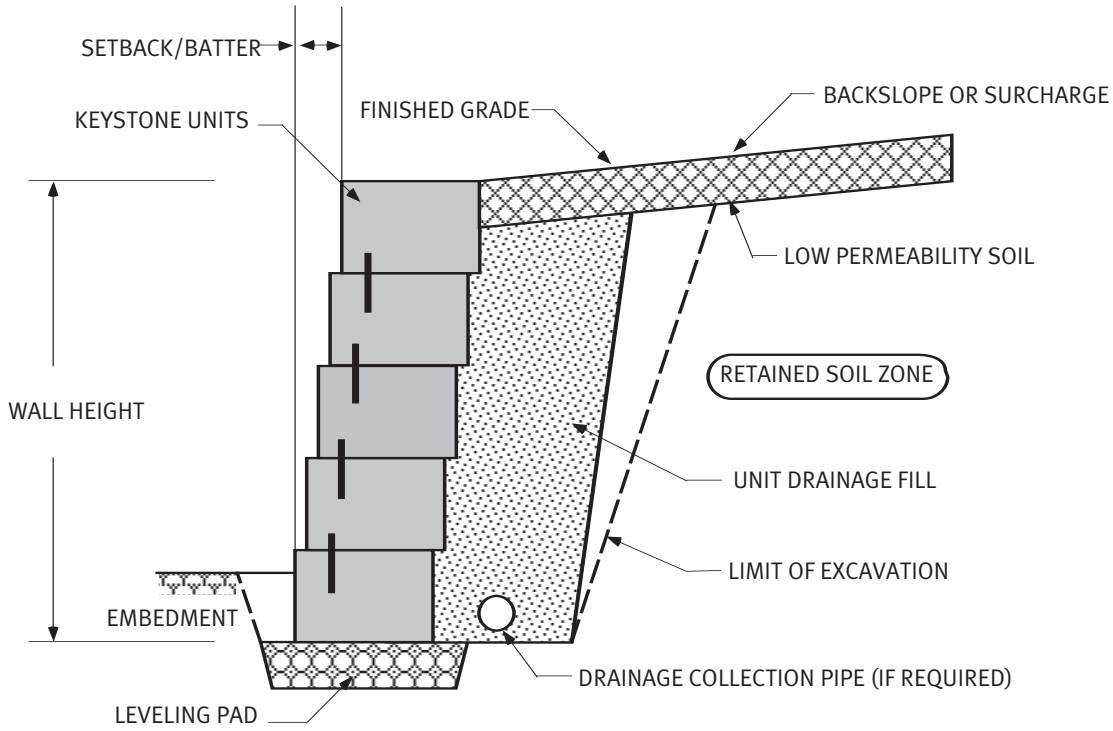
DESIGN CHARTS

GRAVITY WALL SCHEMATIC



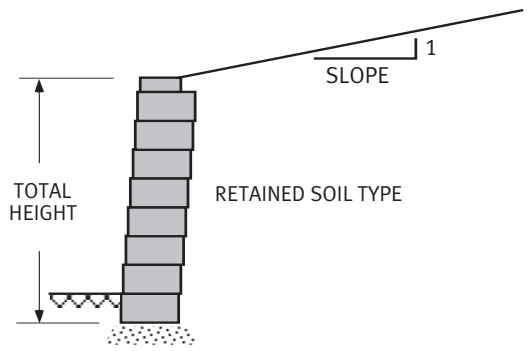
NOTES:

- Wall Height (H) is the total height from top to bottom.
- Minimum wall embedment is 6" (150mm) or Height/20, whichever is greater for level toe.
- Subsurface soils must be capable of supporting wall system.
- Unit drainage fill is 3/4" (20mm) clean crushed stone.
- Leveling pad is crushed stone base material.
- All backfill materials are compacted to 95% max. density.
- Finished grade must provide positive drainage.
- The symbol —(5.0')— indicates location and length of geogrid as measured from the connection pins to the end of the geogrid.

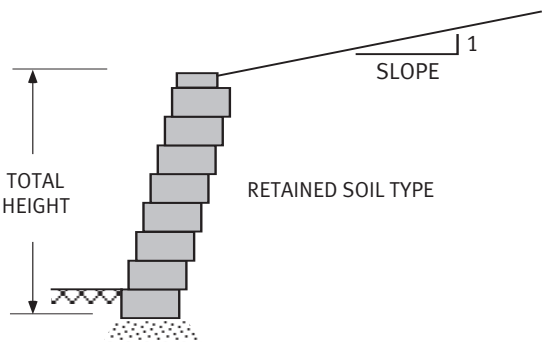
Minneapolis, Minnesota
(952) 897-1040
(952) 897-3858-fax
www.keystonewalls.com

DESIGN CHARTS

GRAVITY WALL TABLES



NEAR VERTICAL WALL
(MINIMUM SETBACK PER UNIT)



ONE INCH SETBACK WALL
(1" MIN. SETBACK PER UNIT) (25MM)

STANDARD/STANDARD II UNITS (18")

MAX. HGT.	BACKSLOPE			
SOIL TYPE	LEVEL	4H:1V	3H:1V	2H:1V
SAND/GRAVEL	4.3' (1.3M)	4.0' (1.2M)	3.8' (1.2M)	3.4' (1.0M)
SILTY SAND	4.0' (1.2M)	3.6' (1.1M)	3.4' (1.0M)	3.0' (0.9M)
SILT/LEAN CLAY	3.6' (1.1M)	3.2' (1.0M)	3.1' (0.9M)	2.1' (0.6M)

STANDARD/STANDARD II UNITS (18")

MAX. HGT.	BACKSLOPE			
SOIL TYPE	LEVEL	4H:1V	3H:1V	2H:1V
SAND/GRAVEL	5.7' (1.7M)	5.2' (1.6M)	5.0' (1.5M)	4.5' (1.4M)
SILTY SAND	5.1' (1.6M)	4.6' (1.4M)	4.3' (1.3M)	3.7' (1.1M)
SILT/LEAN CLAY	4.6' (1.4M)	4.0' (1.2M)	3.8' (1.1M)	2.5' (0.7M)

STANDARD UNITS (21.5")

MAX. HGT.	BACKSLOPE			
SOIL TYPE	LEVEL	4H:1V	3H:1V	2H:1V
SAND/GRAVEL	5.2' (1.6M)	4.7' (1.5M)	4.6' (1.4M)	4.1' (1.2M)
SILTY SAND	4.7' (1.4M)	4.3' (1.3M)	4.1' (1.2M)	3.6' (1.1M)
SILT/LEAN CLAY	4.4' (1.3M)	3.9' (1.2M)	3.7' (1.1M)	2.9' (0.9M)

STANDARD UNITS (21.5")

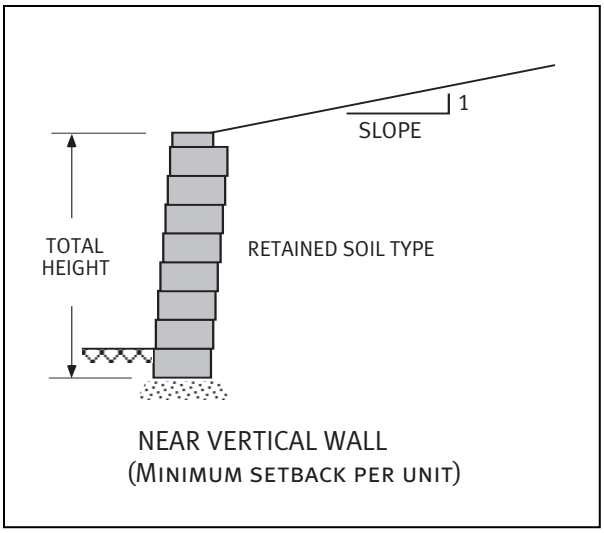
MAX. HGT.	BACKSLOPE			
SOIL TYPE	LEVEL	4H:1V	3H:1V	2H:1V
SAND/GRAVEL	6.8' (2.1M)	6.2' (1.9M)	5.9' (1.8M)	5.3' (1.6M)
SILTY SAND	6.1' (1.9M)	5.5' (1.7M)	5.2' (1.6M)	4.4' (1.3M)
SILT/LEAN CLAY	5.3' (1.6M)	4.5' (1.4M)	4.1' (1.2M)	3.2' (1.0M)

NOTES: CALCULATIONS ASSUME A UNIT WEIGHT OF 120 LBS/CF (19KN/SQM) FOR ALL SOIL TYPES. ASSUMED ϕ ANGLES FOR EARTH PRESSURE CALCULATIONS ARE: SAND/GRAVEL=34°, SILTY SAND=30°, AND SANDY SILT/LEAN CLAY=26°. NON CRITICAL STRUCTURES WITH SF>1.5. NO SURCHARGE LOADINGS ARE INCLUDED. SURCHARGES OR SPECIAL LOADING CONDITIONS WILL REDUCE MAXIMUM WALL HEIGHTS. SLIDING CALCULATIONS ASSUME A 6" (150MM) CRUSHED STONE LEVELLING PAD AS COMPACTED FOUNDATION MATERIAL. THE INFORMATION PROVIDED IS FOR PRELIMINARY DESIGN USE ONLY. A QUALIFIED PROFESSIONAL SHOULD BE CONSULTED. KEYSTONE ACCEPTS NO LIABILITY FOR THE IMPROPER USE OF THESE TABLES.

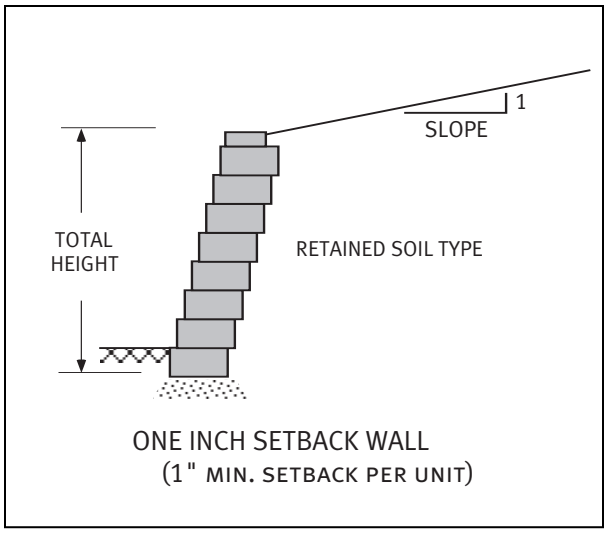
KEYSTONE® RETAINING WALL SYSTEMS A CONTECH COMPANY
Minneapolis, Minnesota
(952) 897-1040
(952) 897-3858-fax
www.keystonewalls.com

DESIGN CHARTS

GRAVITY WALL TABLES



NEAR VERTICAL WALL
(Minimum setback per unit)



ONE INCH SETBACK WALL
(1" min. setback per unit)

▶ COMPAC/COMPAC II UNITS

MAX. HGT.	BACKSLOPE			
Soil Type	Level	4H:1V	3H:1V	2H:1V
Sand/Gravel	2.9' (0.9m)	2.6' (0.8m)	2.5' (0.8m)	2.3' (0.7m)
Silty Sand	2.6' (0.8m)	2.4' (0.7m)	2.3' (0.7m)	2.0' (0.6m)
Silt/Lean Clay	2.4' (0.7m)	2.1' (0.6m)	2.0' (0.6m)	1.7' (0.5m)

▶ COMPAC/COMPAC II UNITS

MAX. HGT.	BACKSLOPE			
Soil Type	Level	4H:1V	3H:1V	2H:1V
Sand/Gravel	3.8' (1.2m)	3.4' (1.0m)	3.3' (1.0m)	2.9' (0.9m)
Silty Sand	3.4' (1.0m)	3.0' (0.9m)	2.9' (0.9m)	2.4' (0.7m)
Silt/Lean Clay	3.0' (0.9m)	2.7' (0.8m)	2.5' (0.8m)	2.1' (0.6m)

NOTE: The Keystone Compac charts above can also be used for Keystone Century Wall™.

Notes: Calculations assume a unit weight of 120 lbs/cf (19kN/sqm) for all soil types. Assumed ϕ angles for earth pressure calculations are: Sand/Gravel=34°, Silty Sand=30°, and Sandy Silt/Lean Clay=26°. Non critical structures with SF>1.5. No surcharge loadings are included. Surcharges or special loading conditions will reduce maximum wall heights. Sliding calculations assume a 6" (150mm) crushed stone levelling pad as compacted foundation material. The information provided is for preliminary design use only. A qualified professional should be consulted. Keystone accepts no liability for the improper use of these tables.

Minneapolis, Minnesota
(952) 897-1040
(952) 897-3858-fax
www.keystonewalls.com