

# Raised Drainage Pipe Should Only be Used When: Gravity Outlet from Base of Wall is Not Possible.

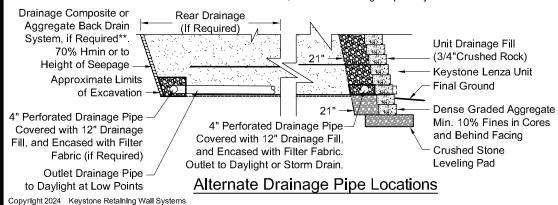
#### Rear Drainage Pipe Should Be Included When:

- Site Geometry Requires Raised Pipe in Order to Outlet at Face.
- Groundwater or Seepage is Present in the Retained Soils.
- Springs or Seasonal Seepage Potential is Noted in the Geotechnical Report.
- Reinforced Soil is of Lower Permeability of the Retained Soils.

Generally, Additional Drainage Material Such as Aggregate Drains and Fabrics and/or Drainage Composite Nets are Used in Conjunction with a Rear Drainage Pipe. When the Above Conditions are Not Present or Groundwater Conditions are Not a Factor, the Rear Drainage Pipe may be Omitted.

Lenza Unit - Vertical (No Setback)

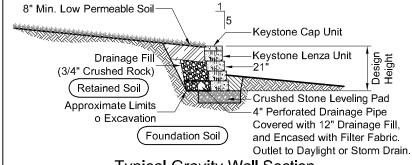
Outlet to Daylight or Storm Drain.



#### 8" Min. Low Permeable Soil Keystone Cap Unit -Keystone Lenza Unit Drainage Fill Retained Soil (3/4" Crushed Rock) Geogrid 🖔 Depth Approximate<sup>2</sup> -Crushed Stone Leveling Pad Limits of -4" Perforated Drainage Pipe Excavation-Covered with 12" Drainage Fill. and Encased with Filter Fabric Foundation Soil Outlet to Daylight or Storm Drain.

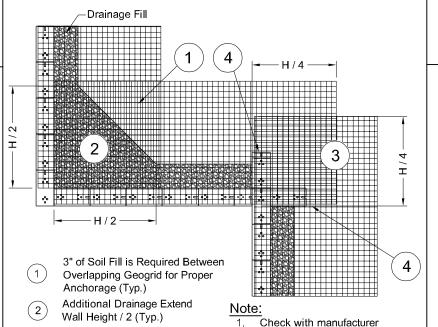
## Typical Reinforced Wall Section

Lenza Unit - 1" Setback



### **Typical Gravity Wall Section**

Lenza Unit - 1" Setback

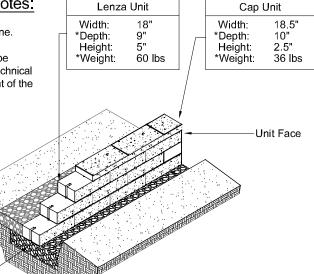


# **Base Leveling Pad Notes:**

 The leveling pad is to be constructed of crushed stone

**Excavation Limits** 

The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.



### Lenza Unit/Base Pad Isometric Section View

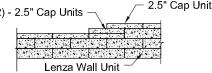
\*Dimensions & Weight May Vary by Region

Note: Secure all cap units with exterior grade construction adhesive.

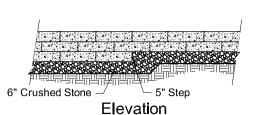
(2) - 2.5" Cap Units — 2.5" Cap Unit

6" Crushed Stone

Leveling Pad

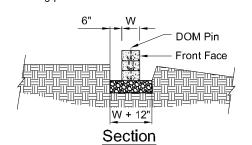


# Top of Wall Steps



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The leveling pad is to be constructed with crushed stone.

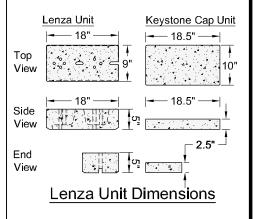


#### Leveling Pad Detail

Strangth Direction

Geogrid is to be Placed on Level Backfill and Extended Over the Fiberglass Pins. Place Next Unit Pull Grid Taut and Backfill. Stake as Required.

#### **Grid & Pin Connection**



Geogrid	Installation	on Corners	and Curves
			_

specifications on correct

geogrid to obtain proper

strength

direction of orientation for

Design is for internal stability of the KEYSTONE wall structure only. External stability, Including but not limited to foundation and slope stability is the responsibility of the Owner. The design is based on the assumption that the materials within the retained mass, methods of construction, and quality of materials conform to KEYSTONE's specification for this project. Substitution of Keystone specified products in the provided design is expressly prohibited.

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Additional Geogrid Extend

Extend Wall to Accomodate

Wall Height / 4 (Typ.)

Wall Batter.

(4)

Designed By:	Title:	Date:
ESR	Typical Lenza Unit Details	
Checked By:	Project:	Project No:
PJS	Keystone Retaining Wall Systems	
Scale:	Typical Wall Details	Drawing No:
No Scale	<b>,</b>	