

ARCHITECTURAL MASONRY UNITS

ENVIRONMENTAL PROFILE



PRODUCT SPECIALIST

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RECYCLED CONTENT % BY WEIGHT



When placing order please indicate the desired mix design

Mix Design	Pre-Consumer	Post-Consumer
Medium Weight	0%	0%
Greenline Medium Weight*	40%	0%
Normal Weight	0%	0%

* Greenline colors may vary from traditional

CEMENT REPLACEMENT

As part of an ongoing effort to reduce the embodied energy of our masonry products, a natural pozzolan is used to replace a minimum of 20% of Portland cement. A case study performed in 2009 resulted in an overall CO² reduction of 380 tons annually.

INDOOR AIR QUALITY

Because architectural block naturally has a beautiful finish, building owners can reduce indoor air pollutants introduced by applying and maintaining coatings and finishes. This will also conserve resources during construction and overall life of the building. In addition when sealers are needed Tri Delta offers a product that contains 0 VOCs.

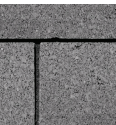
WASTE MANAGEMENT

In today's building climate, masonry products typically will not end up in a landfill. Remaining masonry units can be saved for maintenance purposes or donated, while scrap pieces are commonly recycled into base course aggregate. Most construction haulers today divert concrete products from landfills.

REGIONAL MATERIALS



Manufacturing	100% Regional to Las Vegas Area
● Las Vegas, NV 89030	Cement
● Victorville, CA 92392	Natural Pozzolan
● Jean, NV 89019	Aggregate
● Las Vegas, NV 89124	



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ENERGY EFFICIENCY - R-VALUES/THERMAL MASS

The R-values below are representative of a hollow cavity. Intergal insulation such as loose and foamed in place fills will increase the R-value, while a grout fill will decrease the R-value yet increase the thermal mass properties.

In addition to filling the cavity of a single wythe block, design teams can achieve higher R-values by:

1. Building a layer of insulation between wythes of masonry,
2. Insulating exterior of the building,
3. Insulating interior of the building.

Factors such as cost, aesthetics, durability and maintenance, use of resources and energy performance should be addressed when determining approach.

	Medium Weight	Normal Weight
4" X 8" X 16"	1.7	1.6
6" X 8" X 16"	1.8	1.7
8" X 8" X 16"	2.0	1.9
10" X 8" X 16"	2.0	1.9
12" X 8" X 16"	2.3	2.2

Thermal Mass

When selecting envelope systems it is important to take into account masonry's inherent thermal storage capabilities, referred to as thermal mass. Well designed buildings benefit by reducing indoor temperature fluctuations and therefore peak energy demand. During colder temperatures thermal mass absorbs heat by direct sunlight and later releases heat during colder parts of the day. During warmer temperatures thermal mass serves the opposite function by absorbing heat during the warmer parts of the day and releasing it during off-peak hours when HVAC equipment is more efficient. R-values and U-values do not account for advantages of thermal mass, yet ASHRAE 90.1 allows project teams to measure thermal mass properties when modeling energy performance with programs such as DOE-2.

ACOUSTICAL PERFORMANCE

Offered for all product lines, Acousta Wal® will improve the acoustical performance of your spaces. Acousta Wal® is available in four shapes to suit any project.

Type IV - Absorbs a broad range of sound frequencies and is ideal for gyms and performing arts centers

Type IVRF - Type IV with reinforcement capabilities

Type I - Absorbs low sound frequencies and is ideal for industrial facilities, such as power plants

Type IRF - Type I with reinforcement capabilities

Size and Type	NRC	STC
4" Type I	0.50	49
6" Type I	0.50	52
8" Type IRF	0.50	56
10" Type IRF	0.50	N/a
12" Type IRF	0.50	62
4" Type IV	0.80	49
6" Type IV	0.85	52
8" Type IVRF	0.80	56
10" Type IVRF	0.80	N/a
12" Type IVRF	0.85	62