



deGruchy's Ecologic™ Mortar

... Just add water!



deGruchy's Ecologic™ Mortar, in any of the stock colors, are simply a prepared blend of binder/aggregate/pigments to which you just add water, mix and go to work. Use it to repoint historic buildings, stucco and build new buildings which are considered a Green Application and result in a desired "Old World" Lime finish. It is as simple as mixing the mortar with water using a high torque industrial electric drill and a rigid paddle attachment in five-gallon pail or using a mason's paddle-style mortar mixer. The bag weight is 38.5 pounds.

deGruchy's Ecologic™ Mortar is coded as "DGM" followed by a number to correspond to a certain stock mortar color. "SCG" on bags means "Standard Construction Grade" where no pigment is added. Type "F" stands for "fine sands" for the application of butter joint repointing, fine jointed Ashlar stonework and for smooth stuccos. Type "G" stands for "coarse granules" for most all other applications. The granules in Type G are coarse in comparison to the fine sands in a Type F mortar, but the coarse granules are likened to regular mason's sand that meets ASTM C-144 standards for sharp, well-graded sand. The coarse grains are not as coarse as typical concrete sand. Both the Type F and Type G sands have four grades of sand making up the majority of the component sizes in the entire sand blend. All Stock Ecologic™ Mortars are made with NHL 3.5 and "G" type sand blend. Ecologic™ Mortar (F) with fine sand is also made with NHL 3.5 and is a stock product in the SCG Non-Pigmented color only. All other mixes are considered a custom blend.

The advantage of the pre-blended material with sand and pigment already added is that the mixing can take place on each level of scaffold, if suitable conditions allow using the drill and paddle mixing method, with no excess sand piles or other bags of material stored on site. deGruchy's Ecologic™ pre-blended mortar is all you need. Having all the materials in one bag reduces the temptation for masons to add Portland cement to the straight Natural Hydraulic Limes thinking this is what is customary when they use local type S hydrated lime. The pre-blended material ensures that the engineering of the mortar's final properties is kept in a high quality control environment with the right sand and the right pigments for consistent color.

Ecologic™ Lime Mortar And Color-Matching System

NO Portland Cement is present deGruchy's Ecologic™ mortars yet the stock material will still reach the required 750 p.s.i. required for a type N mortar while maintaining the high permeability required for repointing and repair to historic structures originally built with lime mortars.

Ecologic™ Mortars can be used for sustainable applications in stucco, interior plaster, laying up of masonry units, stonework and as historic building repointing mortars.

The colors shown below represent the 9 stock Ecologic™ Mortar colors.



4 Examples of custom mixes are included in the Ecologic™ Mortar Kit:



25% DGM 100 / 75% DGM 050
with sifted oyster shell inclusions

90% DGM 050 / 10% DGM 250
with extra fine slag fleck
inclusions

90% DGM SCG Non-Pigmented /
10% DGM Grey with fine slag
fleck inclusions

DGM Butter Joint 1 part NHL 2 to
1 part non-sifted pure white
Marble sand

Disclaimer: Many factors affect how this image may appear on your computer monitor and how it prints on your specific printer. Print this page to provide a similar representation of the actual shades of all stock Ecologic™ Mortars. It is suggested that you purchase the Ecologic™ Mortar kit so that you may view each strip individually or hold one or more of these channels of dried mortar up to a building to determine a match when planning to duplicate a repointing mortar.

Ecologic™ Mortar Type G NHL 3.5 Ready Mix

Ecologic™ mortar G is a premixed pure & natural hydraulic lime and sand mortar for building, pointing, repointing, plastering and finishing in a variety of colors.

The absence of cement, ashes, gypsum and other pozzolanic additions together with its other qualities make Ecologic™ mortar G highly suitable for repair and conservation work on traditional, vernacular and historic buildings. In new build the properties of Ecologic™ mortar G will allow joint free construction, dispersion of condensation and will accommodate small settlement movements.

Ecofriendly Characteristics:

- High vapour exchange qualities
- Produced with lower energy than cementitious mixes
- Re-absorption of CO₂ in curing
- Will not deteriorate timber
- Possibility of recycling the materials used in building
- Elimination of painted finishes

Comparison Blends NHL vs. Cement		Ecologic™ NHL 1:2.5	Type N Cement 1:1:6	Type O Cement 1:2:9
Water content		7.76 oz	200 gr	200 gr
Water to binder ratio		1.07	.72	.65
Penetration	INCH	23/64	9/32	9/32
Set (begining)	h	6	1.3	1
Bulk density (no curing)	lb/cu.ft.	134	131	131
Air content	%	0	0	0
Elasticity Moduli	Mpa			
28 days		9000	16200	15595
6 months		13505	22010	19300
12 months		13620	22210	19700
24 months		13785	22150	19650
Flexual strength	PSI			
7 days		83	297	239
28 days		69.6	283	225
6 months		246.5	304	217
12 months		297.25	319	246
24 months		290	319	254
Compressive strength	PSI			
7 days		83	728	719
28 days		213	1116	834
6 months		774	1174	834
12 months		855	1261	877
24 months		870	1232	863
Permeability vapor exchange. gr of air x m2 x hour x		.85	.23	.25

mmHg				
Shrinkage at 28 days	mm.m	.44	.63	.42
Water absorption	L.h.m2	7.3	.23	.25
Capillarity	g.min	4.7	1.08	6.86

Granulometry: G granulometry from #6 (3mm) to #23 (0.08mm) for masonry, pointing, dubbing out, first and main coats on renders and rough finishing coats.

Packing: Ecologic™ mortar G 38.5lbs (17.5kg)

Consumption: (See - Ecologic™ mortar Consumption Chart)

Preparation: in ordinary drum mixers (mix for about 5 minutes)

Water Addition:

Ecologic™ mortar G: .6 gallons (2.25 litres) – .65 gallons (2.50 liters) per bag of 38.5 lbs. (17.5kg)

Application:

On clean and dry background not water proofed. Dampen adequately dry or high suction surfaces. Do not apply at temperatures below 40°F (5°C) or above 85°F (30°C). Protect against strong rain, frost, drying wind or direct strong sun until sufficient hardening has occurred.

The above details are given for information purposes only. Final dosages and application should be checked with our technicians. The Factory reserves the right to alter specifications.