

Mortar containing GIBCO'S<sup>®</sup> MRF<sup>®</sup> shall be applied with with ASTM C270 pactices. Portland Cement used shall comply with ASTM C150, and sand shall comply with ASTM C144. GIBCO'S MRF<sup>®</sup> is a specialty admixture that replaces the lime proportions for the specified mortar type in table 2 of ASTM C270 for Cement-Lime Mortars.

Mortar Type	Portland Cement	GIBCO'S <sup>®</sup> M.R.F <sup>®</sup>	Aggregate Ratio (measured in damp, loose conditions)
М	1	2 oz.	3x vol. of cement
S	1	3 oz.	4x vol. of cement
Ν	1	3 oz.	5x vol. of cement

## Proportions by Volume (Cementitious Materials) AS PER ASTM C270

Mixing recommendations for mortar types are proportioned by the manufacturer in order to meet the property specifications of cement-lime mortars in table 1 of ASTM C270.

## **Mixing Instructions**

Note: GIBCO'S<sup>®</sup> M.R.F<sup>®</sup> reduces the total water needed to achieve desired consistency; be cautious not to over water. Additional water can be added after cement and sand proportions to achieve desired consistency.

- (1) Approximately 1/2 the estimated mixing water required
- (2) Add GIBCO'S<sup>®</sup> M.R.F<sup>®</sup> to the mixing water
- (2) Add sand
- (3) Add cementitious material, and
- (4) The balance of the mixing water required to produce the desired consistency.

\*If mixed in smaller batches with a drill paddle mixer, mix only for a period of 30-45 seconds. Over Mixing can cause additional air entrainment beyond ASTM C270 specifications.