

# THE *NEW & IMPROVED* GSB<sup>®</sup>

## GROUT SAMPLE BOX



OVER  
3,000,000  
GSB<sup>®</sup>  
SOLD

patent #5,942,192

**PATENT APPLIED TECHNOLOGY**



# GROUT SAMPLE BOX<sup>®</sup>

## IMPROVED TECHNOLOGY

- New interlocking tabs offer foolproof assembly and ensures a truly square box. It also prevents distortion during casting and transporting of test specimens.
- New interlocking tabs ensure tight fitting corners which results in precise specimen geometry that is consistently square and perpendicular.



- Re-engineered flaps with staggered folds are integrated to give our sample box a truly flat bottom. This is essential in yielding grout prisms with square ends and sides that are perpendicular to the top and bottom.

## TESTED AND PROVEN

Our patented design has been used over 3 million times in the field. It meets **ASTM C1019, Section 6** and has been proven by tests to yield comparable compressive strength values to samples cast by traditional method regardless of CMU moisture content.



## RESULTS YOU CAN SEE

The new GSB<sup>®</sup> provides specimens that are ready for testing. It yields flat surfaces with perpendicular sides to the tops and bottoms, whereas the pinwheel method usually yields specimens that need to be trimmed and cut.

The Grout Sample Box<sup>®</sup> is permitted (with approval of the specifier) as an alternate forming method in ASTM C1019.

ASTM C1019 contains guidance for performing comparative tests, establishing a conversion factor, and reporting test results.

*The GSB<sup>®</sup> is intended for use with lightweight and normal weight CMU. For heavyweight CMU and brick, refer to the standard "pinwheel" forming method described in ASTM C1019.*



patent #5,942,192



The GSB<sup>®</sup> incorporates a **unique and patented slotted insert** that closely matches the absorption and "wicking" action of typical concrete masonry units.

Independent test data:

Absorption of normal weight block= 1.40%

Absorption of GSB<sup>®</sup> insert and liner= 1.38%

## TEST COMPARISONS

Millions of samples have been cast using the GSB<sup>®</sup>. Independent third party comparative tests have been performed by:

Southwest Inspection & Testing  
 Cascade Testing Laboratory  
 Ninyo & Moore  
 Terracon Consultants  
 Robert L Nelson & Associates  
 Universal Laboratories  
 BTL Engineering Services

### Summary of comparative test data

DESCRIPTION	AVG. 28 Day PSI		Correction Coefficient
	Pinwheel	GSB <sup>®</sup>	(Pinwheel GSB <sup>®</sup> )
Lightweight Block	6200	6320	0.98
Standard Block	6010	6070	0.99
Unspecified Block	3470	3410	1.02
Unspecified Block	3480	3440	1.01

(Slumps ranging from 6" to 10<sup>1/2</sup>"; strengths ranging from 3,000 to 6,500 PSI)

## CONCLUSION

Comparative tests demonstrate no statistically significant difference in test results obtained from samples cast using the GSB<sup>®</sup> and those cast using the traditional pinwheel method.

# The “Traditional” Way

## PINWHEEL METHOD

Specimens are often not symmetrical, requiring expensive and time consuming specimen trimming when using the pinwheel method.



Timely set up to yield unfavorable specimens.



Ready to go.

## COMPARISON

### “PINWHEEL” METHOD

The traditional “pinwheel” method of forming prism samples requires the use of at least twelve concrete masonry units to produce three test specimens, a large flat area to accommodate the molding process, 3.5” X 3.5” X 1” spacers, filter paper and materials to protect the samples in the field during the first 24 hours. Resulting test specimens are often asymmetrical, requiring expensive and time consuming specimen trimming.

### GROUT SAMPLE BOX®

The GSB® on the other hand, requires none of what is listed to the left. It yields specimens of consistent geometry, and provides an additional fourth specimen to be used as a reserve if needed.

The GSB® is in general use and has become the preferred method of forming grout prism specimens for specifiers, ready-mix producers, masonry contractors and testing laboratories.