

# **NAIL HOLDING POWER**

**OF**

# **PERLITE CONCRETE**



**PERLITE INSTITUTE, INC.**

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## INTRODUCTION

One of the advantages of perlite insulating concrete in many types of construction is the fact that it is easily nailable. Roofing contractors, for example, may nail the first ply of built-up roofing to perlite insulating concrete roof decks. In these applications, the holding power of the nails is important.

In general, the force required to remove nails from perlite concrete depends on three factors:

1. Type of nail used.
2. Density of concrete.
3. Age of concrete at time of nailing.

To obtain data on the holding power of several self-clinching nails, Perlite Institute, Inc. initiated a testing program under the supervision of the United States Testing Company, Inc. A description of the test procedure and tabulated results are included in the laboratory report reproduced herein. Data are presented on the E. G. Insuldeck Loc-Nail, Simplex Tube-Lok nail and E/S Products Nail-Tite MK III nail. Additional information on a specific fastener may be obtained directly from the manufacturer.

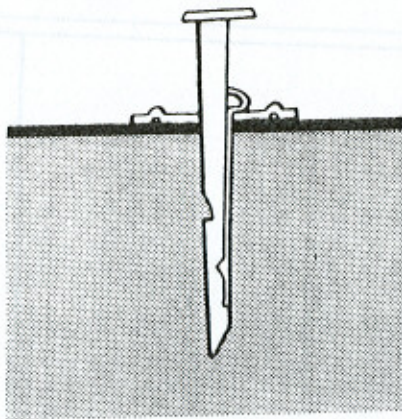
Perlite Institute does not recommend or specify any brand or type of nail. Such recommendations are the prerogative of the roofing manufacturer. As test data on the holding power of other nails become available, they will be included in revisions to this report.

PERLITE INSTITUTE, INC.

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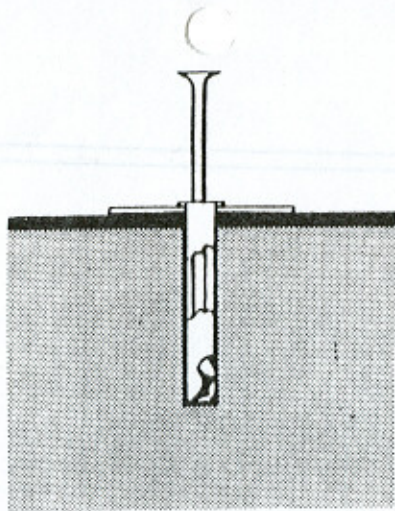
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Revised 1971, 1972



(A)

E. G. Insuldeck Loc-Nail

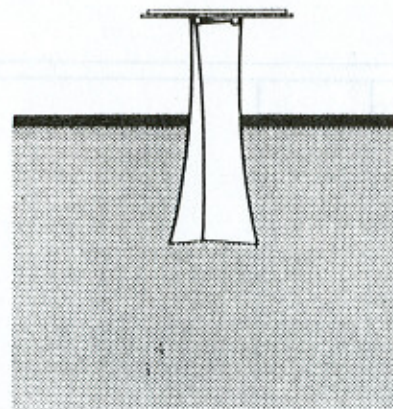
E. G. BUILDING FASTENERS CORP.  
420 Lexington Avenue  
New York, N. Y. 10017



(B)

Simplex Tube Lok Nail

SIMPLEX NAILS, INC.  
P. O. Box 545  
Americus, Georgia 31709

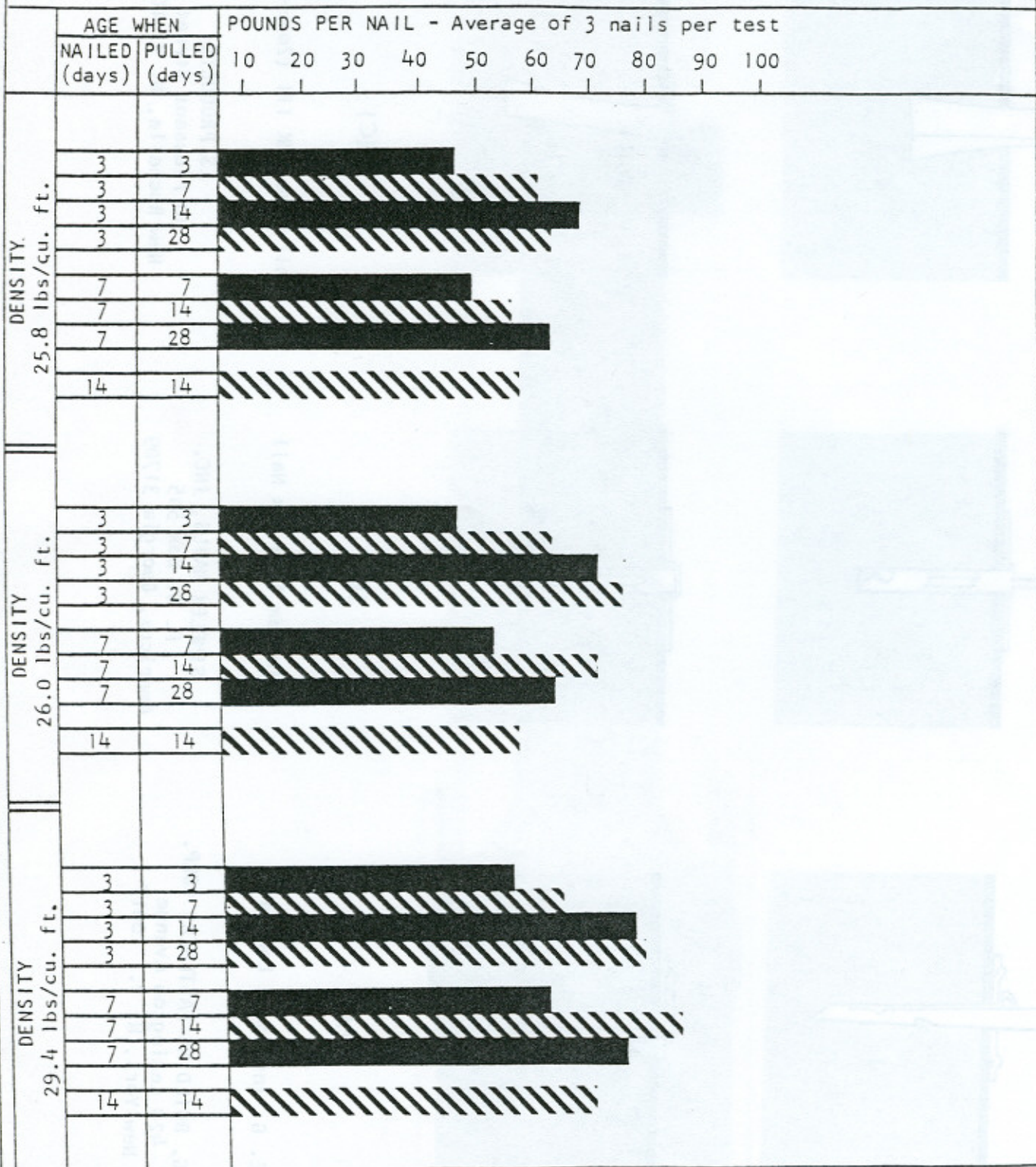


(C)

Nail-Tite® MK III (Zono-Tite)

ES PRODUCTS  
30 Pleasant Street  
New Rochelle, N. Y. 10801

NAIL HOLDING POWER OF PERLITE CONCRETE WITH E. G. INSULDECK LOC-NAIL



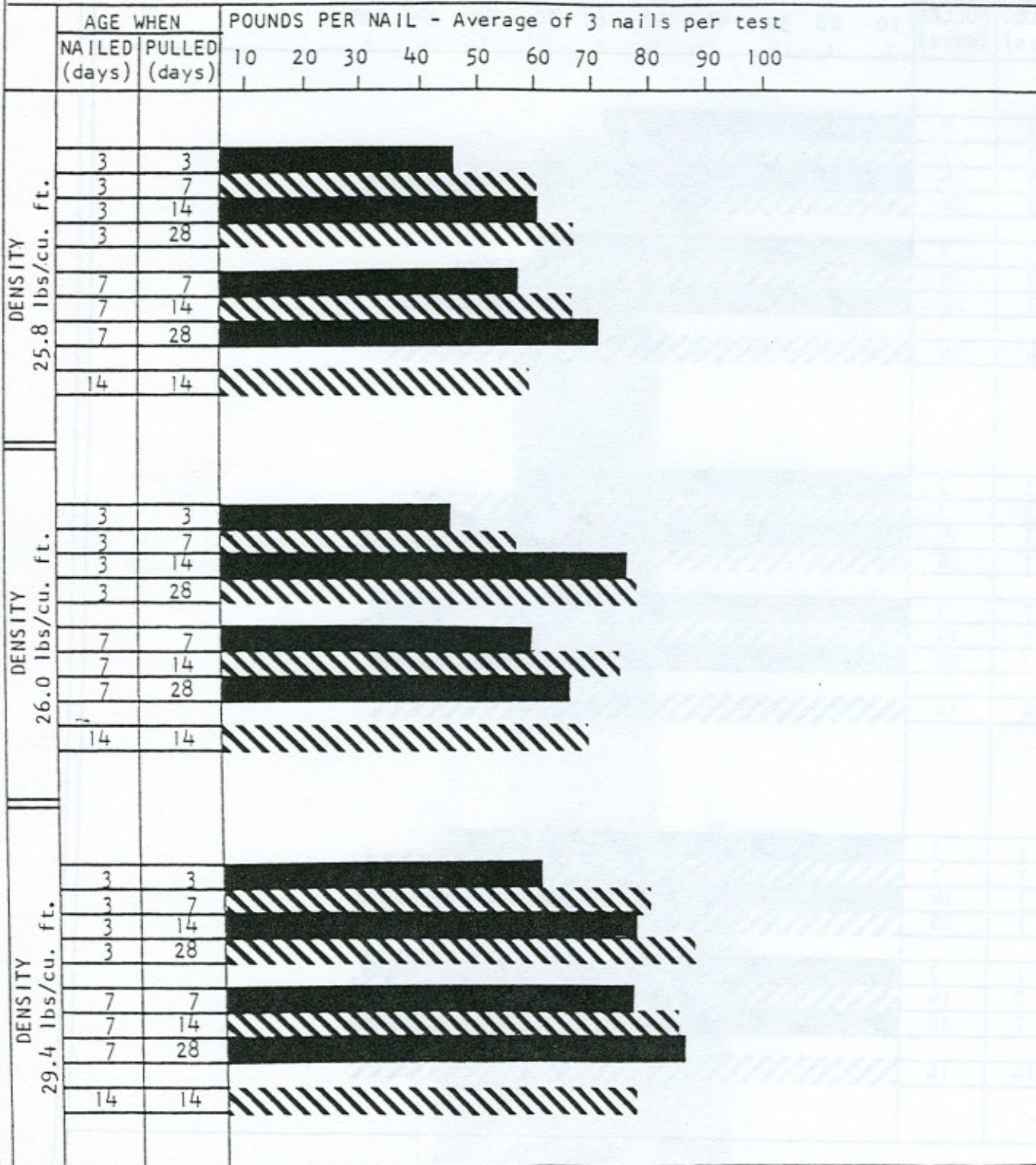
NOTE: For specific data and applicable notations on each withdrawal refer to United States Testing Company, Inc. report.

NAIL HOLDING POWER OF PERLITE CONCRETE WITH ES NAIL-TITE MK III NAIL

	AGE WHEN		POUNDS PER NAIL - Average of 3 nails per test										
	NAILED (days)	PULLED (days)	10	20	30	40	50	60	70	80	90	100	
DENSITY 25.8 lbs/cu. ft.													
	3	3	[Solid bar from 0 to ~55]										
	3	7	[Hatched bar from 0 to ~65]										
	3	14	[Solid bar from 0 to ~95]										
	3	28	[Hatched bar from 0 to ~95]										
	7	7	[Solid bar from 0 to ~70]										
	7	14	[Hatched bar from 0 to ~85]										
	7	28	[Solid bar from 0 to ~90]										
	14	14	[Hatched bar from 0 to ~95]										
DENSITY 26.0 lbs/cu. ft.													
	3	3	[Solid bar from 0 to ~60]										
	3	7	[Hatched bar from 0 to ~85]										
	3	14	[Solid bar from 0 to ~95]										
	3	28	[Hatched bar from 0 to ~95]										
	7	7	[Solid bar from 0 to ~95]										
	7	14	[Hatched bar from 0 to ~95]										
	7	28	[Solid bar from 0 to ~95]										
	14	14	[Hatched bar from 0 to ~95]										
DENSITY 29.4 lbs/cu. ft.													
	3	3	[Solid bar from 0 to ~75]										
	3	7	[Hatched bar from 0 to ~95]										
	3	14	[Solid bar from 0 to ~95]										
	3	28	[Hatched bar from 0 to ~95]										
	7	7	[Solid bar from 0 to ~95]										
	7	14	[Hatched bar from 0 to ~95]										
	7	28	[Solid bar from 0 to ~95]										
	14	14	[Hatched bar from 0 to ~95]										

NOTE: For specific data and applicable notations on each withdrawal refer to United States Testing Company, Inc. report.

NAIL HOLDING POWER OF PERLITE CONCRETE WITH SIMPLEX TUBE-LOK NAIL



NOTE: For specific data and applicable notations on each withdrawal refer to United States Testing Company, Inc. report.