

TECHNICAL SERVICE REPORT
PENSEAL® 244 40% & POWERSEAL® 40
YIELD 210% MORE AVAILABLE SILANE THAN ALCOHOL
SOLUTIONS

Silanes react both chemically and through hydrogen bonding with various chemicals in concrete to provide a hydrophobic structure in the pores of the concrete. This reaction is the basis of the waterproofing and salt resistance properties that silane treatments impart to concrete.

Silanes can only react with concrete chemicals if they are in contact, and most of these reactions are not instantaneous, in fact, they continue for some period of time building waterproofing molecules.

When silane is applied with 125-sq. ft. gal. per NHCHP 244 an isopropyl alcohol, system has 40% by wt., or 35% volume of silane:

Therefore; $\frac{6.72\#}{125 \text{ sq.ft.}} = 24.4 \text{ grams sq.ft. or } 9.76 \text{ Grams or } .35 \text{ oz.}$

ABOUT ½ TEASPOON FULL-
OF ACTIVE SILANE PER SQ.FT. OF CONCRETE AND IT'S
THOUSANDS OF PORES.

Obviously you can not afford to loose any silane to the atmosphere.

The report below proves that PowerSeal and Penseal products are specially formulated to deliver the maximum amount of silane to the concrete or masonry surface. In fact Penseal 244 40% and Powerseal® provides 210% greater silane to the concrete for use in the waterproofing function than competitive alcohol solution silane systems.

TEST BY CALCOAST ANALYTICAL- Ref: Lab File #0425-3A,C-97(See Vexcon doc.#tn136 for full report)

SAMPLE	VAPOR PRESSURE*	VAPOR COMPOSITION* (amount silane)CG/MS
1. Pen Seal 40% in IPA	11.30	2.20
2. Pen Seal 244 40%	2.80	1.04
3. Power Seal 40	4.70	<u>1.0</u>

The lower the numbers the greater amount of silane available for water repellency.

* Amounts are given relative to one another.