

Anchor Bolt Sleeve Applications

Basic Use: The Wilson Anchor Bolt Sleeve is used as an in-place form to provide a grout pocket around an anchor bolt and is used to form a pocket into which a bolt may be grouted. Also may be used where metal pipe is objectionable due to rusting or cost. Use in food processing areas is not a problem due to the inert polyethylene.

Limitations: The Wilson Anchor Bolt Sleeve is not recommended where high heat is used, such as inside an oven.

Technical Services

Assistance in the application, selection and use of Wilson products is available through the manufacturer or area representative free of charge.

Technical Data

See Table 1 for material test data. Each Sleeve is approximately twice the bolt diameter with a depth of 8 bolt diameters, minimum

Tests by a state Department of Transportation laboratory indicates that the Wilson Anchor Bolt Sleeve provided greater pullout strength than the regular grout pocket

The grout pocket was formed in a concrete mass and the sleeve of the same size was cast into the mass. After curing the concrete, #5 reinforcing bars were set in each pocket, using expanding grout. When cured, both bars were given a tensile load. The standard pocket failed when the bar with the grout attached pulled out. The Wilson Anchor Bolt Sleeve retained the grout and failure occurred around the bar. The sleeve remained intact.

When used as a sleeve for anchor bolts the product is in an in-place form and not considered a structural member.

Due to its configuration 180 psi is the maximum compressive loading.

Technical Information

Table 1: Material and Testing Data

Plastic:	High Density Polyethylene
Density gms/cc:	ASTM D 1505-68 .956
Vicat Softening Point °F:	ASTM D 1525-70 256 °F/124 °C
Brittleness Temperature °F:	ASTM D 746-70 -180 °F/-118 °C
Torch Application	Slow Burn
Compression Test	180 psi/12.7 kg/sq. cm.

Table 2: Grout Volume Required

Bolt Size	Bolt Size	Shells Per Carton	Cubic Inches of Grout Per Shell/Carton		Bags of Grout Per Carton
1/2"	2" x 5"	100	15.95	1595	1.06
3/4"	2" x 5"	100	15.16	1516	1.11
5/8"	2" x 7"	100	21.41	2141	1.42
3/4"	2" x 7"	100	20.50	2050	1.36
7/8"	2" x 7"	100	19.52	1952	1.30
1"	3" x 10"	50	65.80	3290	2.19
1-1/4"	3" x 10"	50	61.40	3070	2.04
1-1/2"	4" x 15"	20	167.60	3352	2.23
1-3/4"	4" x 15"	20	158.00	3160	2.11
2"	4" x 18"	20	176.76	3525	2.35
2-1/4"	4" x 18"	20	161.82	3236	2.15
2-1/2"	6" x 24"	10	575.28	5753	3.82
3"	6" x 24"	10	523.44	5235	3.48

NOTE: Grout Estimate based on .87 cu. ft. yield per 100 lb. of non-corrosive grout.

Composition and Materials

The Wilson Anchor Bolt Sleeve is manufactured of high impact plastic. It is non-rusting, non-conductive and lightweight. Single unit construction provides for reduction in installation labor because no welding, threading or cleaning is required. The configuration

is such that the grout and concrete "lock" it in place, providing greater pullout strength than with straight pipes.

Sizes

Available in fifteen standard sizes. See Table 2: Size Schedule (4" and 5" not shown).

Sé Habla Español

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