



distributed by: The Steel Supply Company, Inc
35 Pine Drive
Cold Spring Harbor, NY 11724

phone 631-385-7273
fax 631-385-7274
www.thesteelsupplyco.com

WILSON ANCHOR BOLT SLEEVES

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.

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.

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

Tests by a state Department of Transportation laboratory indicate 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.

TABLE 2: GROUT VOLUME REQUIRED

Bolt Size	Shell Size	Shells per Carton	Cubic inches of Grout per Shell	Cubic inches of Grout per Carton	Bags of Grout per Carton
1/2"	2"x5"	100	15.95	1595	1.06
3/4"	2"x5"	100	15.16	1516	1.11
5/8"	2"x7"	90	21.41	2141	1.42
3/4"	2"x7"	90	20.50	2050	1.36
7/8"	2"x7"	90	19.52	1952	1.30
1"	3"x10"	35	65.80	3290	2.19
1-1/4"	3"x10"	35	65.80	3290	2.19
1-1/2"	4"x15"	12	167.60	3352	2.23
1-3/4"	4"x15"	12	158.00	3160	2.11
2"	4"x18"	9	176.76	3525	2.35
2-1/4"	4"x18"	9	161.82	3236	2.15
2-1/2"	6"x24"	4	575.28	5753	3.82
3"	6"x24"	4	523.44	5235	3.48
4"	6"x24"	4	N/A	N/A	N/A
5"	6"x24"	4	N/A	N/A	N/A

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