

Expansion Shields

Single Expansion Shields

Key Features/Benefits

- Holding power unaffected if bolt is removed and replaced
- One-piece design
- Entire fastener is corrosion-resistant



Order Information and Performance Data

Catalog No.	For Bolt Size	Drill Dia. (in.)	Anchor Length (in.)	Qty. Box/ Carton	2000 psi		Max. Tightening Torque T/Max (ft-lb.)
					Max. Tensile Strength (lb.)	Max. Shear Strength (lb.)	
SES14	1/4-20	1/2	1-5/16	100/1000	860	1560	5
SES56	5/16-18	5/8	1-1/2	50/500	1400	1990	7
SES38	3/8-16	5/8	1-1/2	50/500	1620	3410	10
SES12	1/2-13	7/8	2	25/200	2810	5310	20
SES58	5/8-11	1	2-5/8	25/200	4720	9900	30

Specifications, Listings and Approvals

Anchor Shield and Cone Material:
Zamac Alloy

Federal Specifications: GSA FFS-325, Group II, Type 2, Class 2, Style 1

Installation Instructions – Single and Double Expansion Shields:

1. Drill hole of recommended diameter (slightly deeper than length of shield).
2. Clean the hole using compressed air and a nylon brush.
3. Install shield flush with surface of hole threaded side down. Double shield should be flush to slightly below masonry.
4. Place fixture. Insert machine bolt through fixture into shield and tighten.
5. **Single:** To determine length of bolt: thickness of fixture plus length of shield, equals length of bolt
Double: A deep setting increases holding power of masonry. If desired, place a pipe sleeve between shield and fixture being attached.

NOTE: Always wear safety glasses. Follow the drill manufacturer's safety instructions. Use only solid carbide-tipped drill bits meeting ANSI B212.15 diameter standards.

Double Expansion Shields

Key Features/Benefits

- Eliminates high stress points which can be detrimental in fastening into materials of medium hardness
- Expands fully to provide high-gripping power
- Ideal for shear loads or where joint is subject to side pressure or vibration



Order Information and Performance Data

Cat. No.	For Bolt Size (UNC)	Drill Dia. (in.)	Anchor Length (in.)	Qty. Box/ Carton	2000 psi		Max. Tightening Torque T/Max (ft-lb.)
					Max. Tensile Strength (lb.)	Max. Shear Strength (lb.)	
DES14	1/4-20	1/2	1-5/16	100/1000	1190	1500	5
DES56	5/16-18	5/8	1-1/4	50/500	1525	1890	7
DES38	3/8-16	3/4	1-1/2	50/400	2175	3290	10
DES12	1/2-13	7/8	2	25/200	4600	5100	20
DES58	5/8-11	1	2-1/4	25/200	5210	9900	30
DES34	3/4-10	1-1/4	2-7/8	10/80	9650	13600	40

Specifications, Listings and Approvals

Anchor Shield and Cone Material:
Zamac Alloy

Federal Specifications: GSA FF-S-325, Group II, Type 2, Class 2, Style 2