

Drop-In Internally Threaded Anchor (DIAB)

Expansion shell anchors for use in solid base materials

Mechanical Anchors

Simpson Strong-Tie introduces a redesigned Drop-In Anchor (DIAB) that provides easier installation into base materials. Improved geometry in the preassembled expansion plug improves setting capability so the anchor installs with 40% fewer hammer strikes than previous versions. These displacement-controlled expansion anchors are easily set by driving the plug toward the bottom of the anchor using either the hand- or power-setting tools. DIAB anchors feature a positive-set marking indicator at the top of the anchor — helping you see more clearly when proper installation has taken place.

Use a Simpson Strong-Tie fixed-depth stop bit to take the guesswork out of drilling to the correct depth. The fluted design of the tip draws debris away from the hole during drilling, allowing for a cleaner installation.

Key features

- New design offers easier installation than previous drop-in anchor design — sets with 40% fewer hammer hits
- Positive-set marking system indicates when anchor is properly set
- Lipped drop-in version available for flush installation
- Hand- and power-setting tools available for fast, easy and economical installation
- Fixed-depth stop bit helps you drill to the correct depth every time
- Available in coil-thread version for ½" and ¾" coil-thread rod

Codes: FM 3053987; UL File Ex3605; multiple DOT listings.
Meets the requirements of Federal Specification A-A-55614, Type 1.

Material: Carbon steel

Coating: Zinc plated



Drop-In

Lipped
Drop-InCoil-Thread
Drop-In

Drop-In Internally Threaded Anchor (DIAB)

Fixed-Depth Drill Bits for DIAB

Model No.	Drill Bit Diameter (in.)	Drill Depth (in.)	Drop-In Anchor (in.)
MDPL037DIA	3/8	1 1/16	1/4
MDPL050DIA	1/2	1 1/16	3/8
MDPL062DIA	5/8	2 1/16	1/2



Fixed-Depth Drill Bit

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Anchor being set with hand setting tool.



Anchor being set with SDS setting tool.



Positive set indicator.

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Drop-In Anchor

Rod Size (in.)	Model No.	Drill Bit Dia. (in.)	Bolt Threads (per in.)	Body Length (in.)	Thread Length (in.)	Quantity	
						Box	Carton
1/4	DIAB25	3/8	20	1	3/8	100	500
3/8	DIAB37	1/2	16	1 9/16	5/8	50	250
1/2	DIAB50	5/8	13	2	3/4	50	200
5/8	DIAB62	7/8	11	2 1/2	1	25	100
3/4	DIAB75	1	10	3 1/8	1 1/4	20	80



Drop-In

Lipped Drop-In Anchor

Rod Size (in.)	Model No.	Drill Bit Dia. (in.)	Bolt Threads (per in.)	Body Length (in.)	Thread Length (in.)	Quantity	
						Box	Carton
1/4	DIABL25	3/8	20	1	3/8	100	500
3/8	DIABL37	1/2	16	1 9/16	5/8	50	250
1/2	DIABL50	5/8	13	2	3/4	50	200



Lipped Drop-In

Coil-Thread Drop-In Anchor

Rod Size (in.)	Model No.	Drill Bit Dia. (in.)	Bolt Threads (per in.)	Body Length (in.)	Thread Length (in.)	Quantity	
						Box	Carton
1/2	DIAB50C ¹	5/8	6	2	3/4	50	200
3/4	DIAB75C ¹	1	4 1/2	3 1/8	1 1/4	20	80



Coil-Thread Drop-In

1. DIAB50C and DIAB75C accept 1/2" and 3/4" coil-thread rod, respectively.

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DIABST Drop-In Anchor Hand-Setting Tool

Hand-setting tool designed for use with the Simpson Strong-Tie® Drop-In anchor (DIAB), ensuring fast, easy and economical installation.

**Hand Setting Tool**

Model No.	Description	Box Quantity	Carton Qty.
DIABST25	Setting tool for use with Drop-In models DIAB25, DIABL25	10	50
DIABST37	Setting tool for use with Drop-In models DIAB37, DIABL37	10	50
DIABST50	Setting tool for use with Drop-In models DIAB50, DIABL50, DIAB50C	10	50
DIABST62	Setting tool for use with Drop-In model DIAB62	5	25
DIABST75	Setting tool for use with Drop-In models DIAB75, DIAB75C	5	20

1. Setting tools sold separately. Tools may be ordered by the piece.

DIABST (SDS-plus®) Drop-In Anchor Power-Setting Tool

Power-setting tool featuring an SDS-plus shank, designed for use with the Simpson Strong-Tie Drop-In anchor (DIAB), ensuring fast, easy and economical installation.


**Power Setting Tool**

Model No.	Description	Box Quantity	Carton Qty.
DIABST25-SDS	Power-setting tool for use with Drop-In models DIAB25, DIABL25	10	50
DIABST37-SDS	Power-setting tool for use with Drop-In models DIAB37, DIABL37	10	50
DIABST50-SDS	Power-setting tool for use with Drop-In models DIAB50, DIABL50, DIAB50C	10	50

1. Setting tools sold separately. Tools may be ordered by the piece.

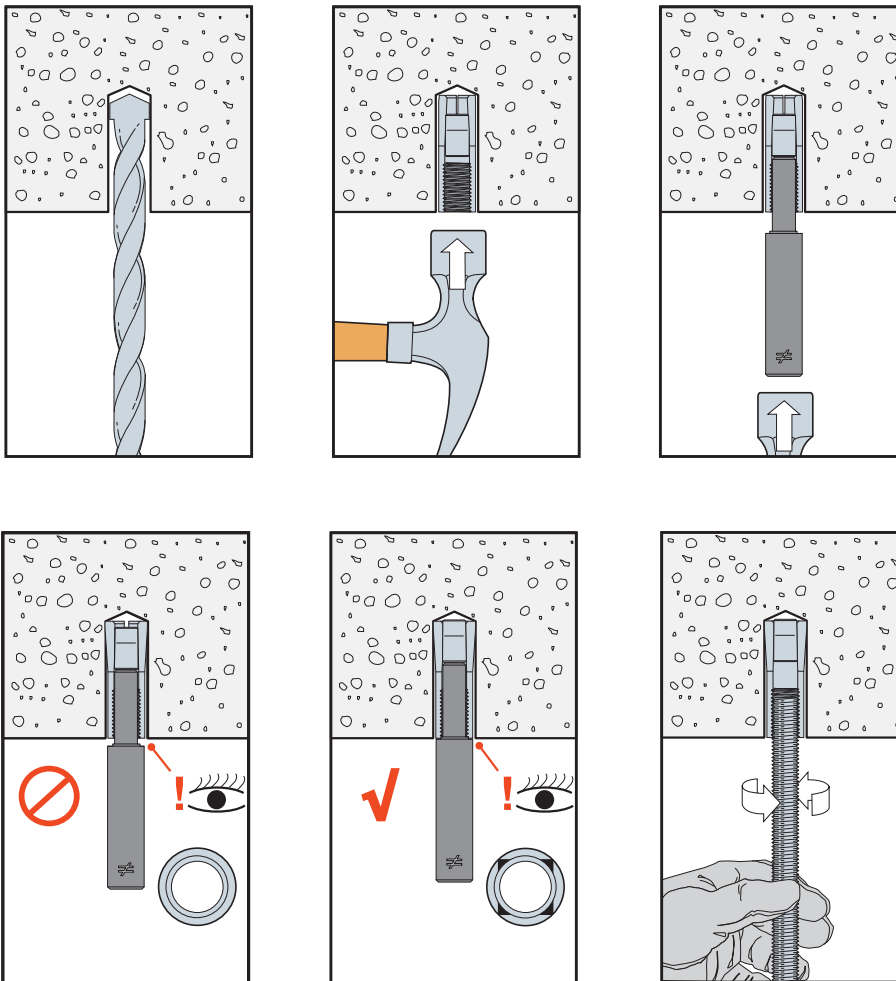
Drop-In Internally Threaded Anchor (DIAB)

DIAB Manual Installation

 **Caution:** Oversized holes will reduce the anchors load capacity.

1. Drill a hole in the base material using the appropriate diameter carbide drill bit or fixed-depth bit as specified in the table. Drill the hole to the specified embedment. For fixed-depth bits drill the hole until the shoulder of the bit contacts the surface of the base material. Then blow the hole clean of dust and debris using compressed air. Overhead installations need not be blown clean.
2. Insert the anchor into the hole. Tap with hammer until flush against the surface.
3. Using the designated Drop-In setting tool, drive expander plug towards the bottom of the anchor until the shoulder of the setting tool makes contact with the top of the anchor. When properly set four indentations will be visible on the top of the anchor indicating full expansion.
4. Insert bolt or threaded rod. Minimum thread engagement should be equal to the nominal diameter of the threaded insert.

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Drop-In Internally Threaded Anchor (DIAB)

DIAB SDS Installation



Caution: Oversized holes will reduce the anchors load capacity.

1. Drill a hole in the base material using the appropriate diameter carbide drill bit or fixed-depth drill bit as specified in the table. Drill the hole to the specified embedment. For fixed-depth bits drill the hole until the shoulder of the bit contacts the surface of the base material. Then blow the hole clean of dust and debris using compressed air. Overhead installations need not be blown clean.
2. Insert the anchor into the hole. Tap with hammer until flush against the surface.
3. Attach SDS Drop-In setting tool to a drill. Drive expander plug towards the bottom of the anchor using only hammer mode until the shoulder of the setting tool makes contact with the top of the anchor. When properly set four indentations will be visible on the top of the anchor indicating full expansion.
4. Insert bolt or threaded rod. Minimum thread engagement should be equal to the nominal diameter of the threaded insert.

