

DROP-IN Internally-Threaded Expansion Shell Anchor



Drop-in anchors are internally-threaded, deformation-controlled expansion anchors with a preassembled expander plug, suitable for flush mount applications in solid base materials. The anchor is set by driving the expansion plug towards the bottom of the anchor using the setting tool. Drop-in anchors are also available in coil-threaded versions for 1/2" and 3/4" coil threaded rod.

The Lipped Drop-In (DIAL) features a lip at the top of the anchor body that keeps the top of the anchor flush with the concrete. This eliminates the need for precisely drilled hole depths and allows for easier flush installation, consistent embedment and uniform rod lengths.

The 3/8" Short Drop-In Anchor (DIA37S) is for use in solid and hollow concrete. The short length permits shallow embedment, thus avoiding drilling into rebar or prestressing strands. The wide surface flange allows the DIA37S to be installed in deep or bottomless holes.

MATERIAL: Carbon and stainless steel
(DIA37S available in zinc plated carbon steel only)

FINISH: Carbon steel: Zinc plated

INSTALLATION:

- Drill a hole in the base material using the appropriate diameter carbide drill bit as specified in the table. Drill the hole to the specified embedment depth plus 1/8" for flush mounting. Blow the hole clean using compressed air. Overhead installations need not be blown clean.

Caution: Oversized holes will make it difficult to set the anchor and will reduce the anchor's load capacity.

- Insert anchor into hole. Tap with hammer until flush against surface.
- Using the Drop-in setting tool, drive expander plug towards the bottom of the anchor until shoulder of setting tool makes contact with the top of the anchor.

CODES: Drop-In: City of L.A. RR24682; Factory Mutual 3017082; Underwriters Laboratories File Ex3605. Meets requirements of Federal Specifications A-A-55614, Type I. Short Drop-In: Factory Mutual 3017082 & Underwriters Laboratories File Ex3605.

The load tables list values based upon results from the most recent testing and may not reflect those in current code reports. Where code jurisdictions apply, consult the current reports for applicable load values.

TEST CRITERIA: The Drop-In anchor has been tested in accordance with ICC-ES's Acceptance Criteria for Expansion Anchors (AC01) for the following:

- Seismic/wind loading
- Combination tension and shear loads
- Critical and minimum edge distance and spacing

SUGGESTED SPECIFICATIONS: Drop-In anchors shall be internally threaded, expanding shell anchors. The anchor shell shall be zinc plated carbon steel with a minimum 70,000 psi tensile strength, type 303 or 316 stainless steel, as called for on the drawings. Drop-In anchors shall meet Federal Specification A-A-55614, Type I. Anchors shall be Drop-In anchors from Simpson Strong-Tie, Pleasanton, CA. Anchors shall be installed following the Simpson Strong-Tie instructions for Drop-In internally threaded expansion shell anchors.



Drop-In



Lipped Drop-In



Short Drop-In



Coil-Thread Drop-In

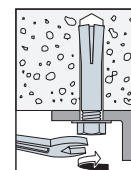
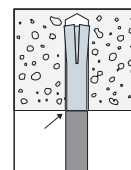
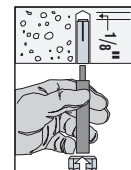
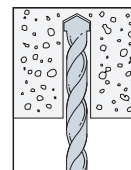


Material Specifications

Anchor Component	Component Material		
	Zinc Plated Carbon Steel	Type 303 Stainless Steel	Type 316 Stainless Steel
Anchor Body	Meets minimum 70,000 psi tensile	AISI 303. Meets chemical requirements of ASTM A-582	Type 316
Expander Plug	Meets minimum 50,000 psi tensile	AISI 303	Type 316
Thread	UNC 2B/Coil-thread	UNC 2B	UNC 2B

Note: DIA37S, DIA50C and DIA75C are not available in stainless steel.

Installation Sequence (Short Drop-In anchor similar)



DROP-IN *Internally Threaded Expansion Shell Anchor*



Drop-In Anchor Product Data - Carbon and Stainless Steel

Rod Size (in.)	Carbon Steel Model No.	303 Stainless Model No.	316 Stainless Model No.	Drill Bit Diameter (in.)	Bolt Threads (per in.)	Body Length (in.)	Quantity	
							Box	Ctn.
1/4	DIA25	DIA25SS	DIA256SS	3/8	20	1	100	500
3/8	DIA37	DIA37SS	DIA376SS	1/2	16	1 1/2	50	250
1/2	DIA50	DIA50SS	DIA506SS	5/8	13	2	50	200
5/8	DIA62	DIA62SS	•	7/8	11	2 1/2	25	100
3/4	DIA75	DIA75SS	•	1	10	3 1/8	20	80



Drop-In Anchor

Lipped Drop-In Anchor Product Data

Rod Size (in.)	Carbon Steel Model No.	Drill Bit Diameter (in.)	Bolt Threads (per in.)	Body Length (in.)	Quantity	
					Box	Ctn.
1/4	DIAL25	3/8	20	1	100	500
3/8	DIAL37	1/2	16	1 1/2	50	250
1/2	DIAL50	5/8	13	2	50	200



Lipped Drop-In Anchor

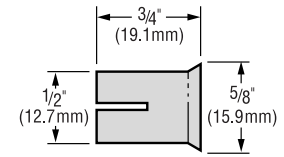
Short Drop-In Anchor Product Data

Rod Size (in.)	Carbon Steel Model No.	Drill Bit Diameter (in.)	Bolt Threads (per in.)	Body Length (in.)	Quantity	
					Box	Ctn.
3/8	DIA37S ¹	1/2	16	3/4	100	500

1. A dedicated setting tool is included with each box of the DIA37S.



Short Drop-In Anchor



Short Drop-In Anchor Dimensions

Coil-Thread Drop-In Anchor Product Data

Rod Size (in.)	Carbon Steel Model No.	Drill Bit Diameter (in.)	Bolt Threads (per in.)	Body Length (in.)	Quantity	
					Box	Ctn.
1/2	DIA50C ¹	5/8	6	2	50	200
3/4	DIA75C ¹	1	5	3 1/8	20	80

1. DIA50C and DIA75C accept 1/2" and 3/4" coil-thread rod, respectively.



Coil-Thread Drop-In Anchor

Drop-In Anchor Setting Tool Product Data

Model No.	For use With	Box Qty.
DIAS25	DIA25, DIAL25	10
DIAS37	DIA37, DIAL37	10
DIAS50	DIA50, DIA50C, DIAL50	10
DIAS62	DIA62	5
DIAS75	DIA75, DIA75C	5

1. Setting Tools sold separately except for DIA37S.
2. Setting Tools for use with carbon and stainless steel Drop-In anchors.



Standard Setting Tool