



# Century-Line® Engineered Sleeves

## Century-Line® Sleeves

are used to create circular holes in concrete poured barriers of all types including; walls, floors and ceilings. Molded from non-conductive, high impact resistant HDPE, Century-Line® sleeves are lightweight and easily installed by one construction worker without use of cranes or hoists. They are available in 16 diameters ranging from 2" to 25" (51mm - 635mm) and shipped, from stock, in any desired length.

Weight Comparison	
WS Steel Sleeve WS-12-37-S-12 = 60 lbs.	Century-Line Sleeve CS-12-12 = 6.5 lbs

### Features

**16 sizes - 2" to 25" in diameter. Local stock, drop ship overnight.**

In the event of a field or engineering change, sleeves may be cut shorter at the job site using ordinary hand tools. Standard sleeves are 16" (406mm) in length. Longer length models may also be quickly fabricated as a custom ordered item.

**1/8 the weight of steel.**

Century-Line® sleeves are light enough for one worker to install without a crane, hoist or helper which reduces installation time and costs. Century-Line® sleeves are easy to stock and far less expensive to ship, when compared to steel sleeves.

**Resists water migration.**

The 2" (50.8mm) water stop collar not only anchors the sleeve in position but creates a path against the migration of water around the outside of the sleeve.

**Adjusts to wall thickness.**

Century-Line sleeves' unique hollow water stop collar acts like an expansion joint, adjusting (up to 1/2" - 12.7mm) to the thickness of the wall. This compressive force reacts against the forms like a spring, creating pressure and maintains proper sleeve location within the form.

**Nailer end caps position sleeve precisely in form.**

Specially designed end caps provide an ideal method for attaching Century-Line® sleeves to the concrete forms. The end caps assure that the sleeve holds its circular configuration during the pour. In addition to keeping out wet concrete, they also prevent dirt from entering the sleeve during backfill operations or the interim construction period.

**Tough high density polyethylene (HDPE) construction.**

High impact resistant HDPE also provides excellent resistance to acids, alkalis and other organic solvents. Ideal for cathodic protection systems, these non-conductive sleeves will neither rust, corrode or degrade. Low-temperature properties are such that they may be installed under any weather conditions suitable for pouring concrete. High temperature application limit is 150° F. (66° C.). The sleeve is molded with a texture on the outside surface to assure a better bond than most plastic to concrete interfaces.

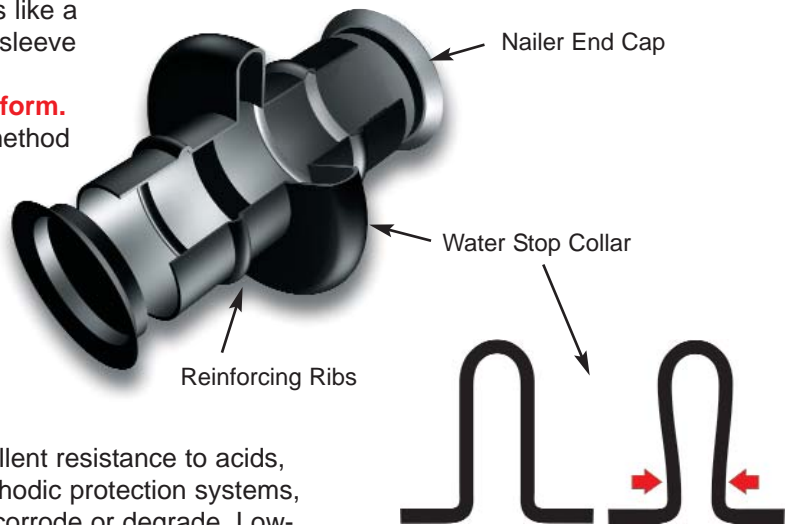
**Used for shotcrete wall applications.**

For shotcrete applications, Century-Line sleeves are easily positioned to wall form with threaded rod, and the end caps protect the sleeve penetration while the wall is formed.

**Weights and Dimensional Data  
Model CS (16" length)**

MODEL	I.D. (In.)	I.D. (mm)	lbs.	Kg.
CS-2	1.98	50.3	0.70	0.32
CS-3	2.94	74.7	1.30	0.59
CS-3-1/2	3.38	85.9	1.50	0.68
CS-4	4.03	102.4	2.00	0.90
CS-5	5.14	130.6	2.80	1.27
CS-6	6.14	156.0	3.60	1.63
CS-8	8.21	208.5	4.80	2.18
CS-10	10.19	258.8	6.40	2.90
CS-12	12.26	311.4	7.20	3.27
CS-14	14.14	359.2	11.20	5.08
CS-16	16.18	411.0	12.00	5.44
CS-18	17.45	443.2	15.50	7.03
CS-20	19.12	485.6	17.50	7.94
CS-22	20.32	516.1	21.00	9.53
CS-24	22.76	578.1	22.00	9.98
CS-25	24.81	630.2	23.00	10.43

**Note:** Swimming pool, floor, and shotcrete applications; please specify exact lengths when ordering. Typically, a form is not installed on the top of a pool or floor, the CS sleeve water stop will not compress in these applications.



**Adjusts To Wall Thickness**

Century-Line sleeves unique hollow water stop collar works like an expansion joint, adjusting (up to 1/2") to the thickness of wall. This design creates a dynamic force against the form.