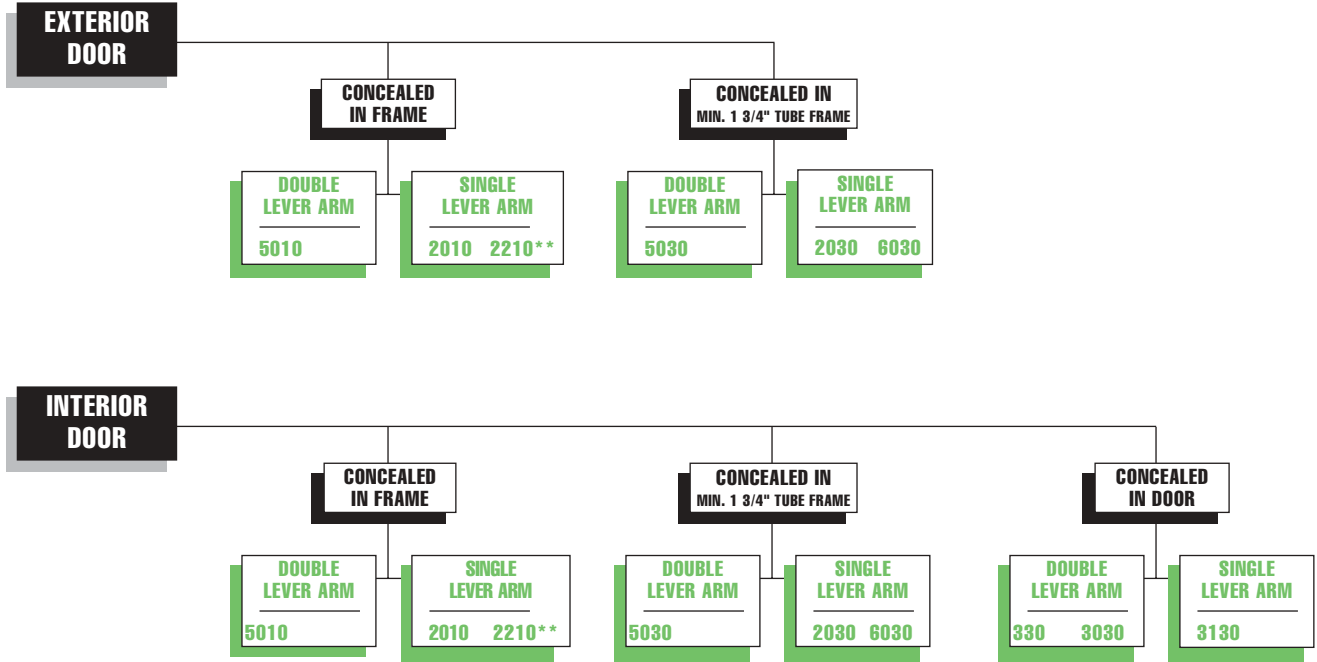


CONCEALED SERIES

PRODUCT SELECTION GUIDE

The concealed LCN closers feature a modern design for concealment in either the head frame or top rail of the door. This guide is based on the desired mounting of the closer.



** INDICATES HIGH SECURITY CLOSER, DOOR POSITION SWITCH OPTIONAL. REFER TO HIGH SECURITY SECTION OF THE CATALOG.

PRODUCT COMPARISON

This chart shows a basic comparison of LCN concealed closers. Refer to the specific closer chapter for complete details.

CLOSER SERIES	CONCEALED MOUNTING			FINISH		CYLINDER		ARM		*ARM FUNCTION				
	IN FRAME	IN 1 3/4" TUBE	IN DOOR	POWDER COAT	PLATED	HANDED	SIZED	ACCESSIBILITY	DELAYED ACTION	CONCEALED	EXPOSED	STANDARD (SINGLE)	REGULAR (DOUBLE)	HOLD-OPEN
330	○	○	●	●	●	●	●	○	○	○	●	○	180°	180°
2010	●	○	○	●	●	●	●	○	○	●	○	○	180°	110°
2030	○	●	○	●	●	●	●	○	○	●	○	○	180°	110°
3030	○	○	●	●	●	●	●	○	○	○	●	○	180°	140°
3130	○	○	●	●	●	●	●	○	○	○	●	○	140°	100°
5010	●	○	○	●	●	●	●	○	○	○	●	○	180°	180°
5030	○	●	○	●	●	●	●	○	○	○	●	○	180°	180°
6030	○	●	○	●	●	○	●	○	○	●	○	○	95°	95°

- Available
- Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.

*Maximum opening/hold-open point with standard template. See individual closer series for degrees of opening per installation.

CONCEALED SERIES

APPLICATIONS

- ▶ For aluminum, hollow metal, or wood doors and frames.
- ▶ Can be used with hinge or pivot mounted door.
- ▶ Closers for 4" or minimum 1 3/4" head frame or 4" top rail.
- ▶ Mounting clips for wood frames and other installation accessories available for unusual conditions.
- ▶ For concealed in door closers consult factory for installations with pivots.

FEATURES COMMON TO CONCEALED CLOSERS

- ▶ Mountings for head frame or door top rail.
- ▶ Handed for right or left swinging doors. (except 6030)
- ▶ Closers to meet ADA reduced opening force requirements.
- ▶ Adjustable hydraulic backcheck cushions opening swing prior to 90°.
- ▶ Separate regulation of general closing speed and latching speed.
- ▶ Joints in arm and shoe adapt to uneven trim. (for double lever arms)

DESIGN ASSISTANCE

LCN has been providing reliable solutions to unique door control problems for over 75 years. Design and specification assistance are only a phone call away.

Contact LCN for assistance or technical information at **800-526-2400** or FAX **800-248-1460 (customer service)**, Fax **815-879-1495** for Application Engineering.

WARRANTY

10 year limited warranty. See General Section for complete warranty details.

SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

MATERIALS (Closers concealed in the door or frame)

- ▶ High strength **cast iron** cylinder.
- ▶ **Forged steel** main arms (except 6030).
- ▶ One piece **forged steel** piston.
- ▶ **Double heat treated** pinion.
- ▶ **All weather fluid** in overhead concealed models eliminates seasonal adjustments.
- ▶ **High efficiency, full complement**, low friction bearings.
- ▶ Tamper resistant regulating screws.
- ▶ Full rack and pinion hydraulic action.
- ▶ Quiet, low friction track and roller combination for all single lever (standard) arm closers.

FINISHES

- ▶ Available in seven standard or a wide selection of optional custom powder coat finishes to blend with door and frame.
- ▶ LCN's powder coat finish surpasses 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance.
- ▶ For installations where a higher level of corrosive resistance is required, LCN offers an optional special rust inhibiting (SRI) pre-treatment. Closers that combine the exclusive LCN powder coat finish and the SRI pre-treatment exceed the ANSI standard for corrosion resistance even further.
- ▶ Plated finishes are available as an option to accent door and frame.

LISTINGS & APPROVALS

UL listed for self-closing doors without hold-open under "SWINGING DOOR CLOSERS" (GVEV) file R 1943.

Tested and certified under ANSI Standard A156.4. Consult factory for details.

Consult factory for other listings such as; ULC, California State Fire Marshal, Bureau of Standards and Appeals.

POSITIVE PRESSURE

LCN closers have been certified for three hours by UL to be in compliance with UBC 7.2 (1997) and UL 10 C. Contact LCN for specific details on door closer fire ratings.

FASTENERS

Standard WOOD and MACHINE SCREW (WMS) pack contains phillips head wood and machine screws to install the closer. TORX machine screws are available for some closers.

Note 1: Phillips head, metric machine screws are available, please specify.

MAINTENANCE

Closers mounted according to LCN installation instructions require no periodic maintenance or adjustments.