



Notes:

- Do not scale drawing.
- Right hand door shown. Same dimensions apply for left hand door, measured from centerline of hinge or pivot.
- Template information based upon use of 4-1/2" hinges or 3/4" offset pivots.
- Dimensions are shown in inches and millimeters (mm).
- Hollow metal doors require channel or box-type reinforcement when thru-bolt mount is specified.
- Sleeve nuts and bolts are required for wood or plastic faced fire-door installations.
- Minimum thickness recommended for reinforcements in hollow metal doors and frames is .1046 (2.66) unless noted otherwise.
- Minimum ceiling clearance for closer unit is 2" (50).
- Maximum door opening is 105°.
- Charted dimensions measured from door rabbet.

Frame Type	Dim. "A"	Dim. "B"	Dim. "C"
Single Step	1-3/8 (39)	1-7/16 (37)	1-1/4 (32)
Double Step	1-1/4 (32)	1-5/8 (41)	1-7/16 (37)

Preparation for Fasteners			
	Fasteners	Door or Frame	Drill-Sizes
Standard	1/4" - 20 machine screw	Metal	Drill: #7 (0.201" dia.) Tap: 1/4" - 20
	Sleeve nuts and bolts	Hollow Metal Aluminum or Wood	9/32" (7 mm) through; 3/8" (9.5 mm) door face opposite to closer 3/8" (9.5 mm) through
Optional	Through-bolts and grommet-nuts	All	9/32" (7 mm); 3/8" (9.5 mm) dia. 3/8" (9.5 mm) deep on door opposite to closer

**Norton Series 7700OPTO-DE Support Unit
For Installations with a Double Egress Frame
Combination Door Closer-Holder with Single Point Hold Open
Hinge (Pull) Side of Door Installation with Hinge Side Frame Reveals 1/8" to 3" (3 to 76mm)**

**NORTON
RIXSON**

ASSA ABLOY

TEMPLATE NUMBER	REV	DATE
7378-1811	2	02/22