Strut Locations	
7'	8'
3"	3"
18.5"	18.5"
23.5"	23.5"
39.5"	36.5"
44.5"	41.5"
60.5"	54.5"
65.5"	59.5"
83"	72.5"
	77.5"
	95"

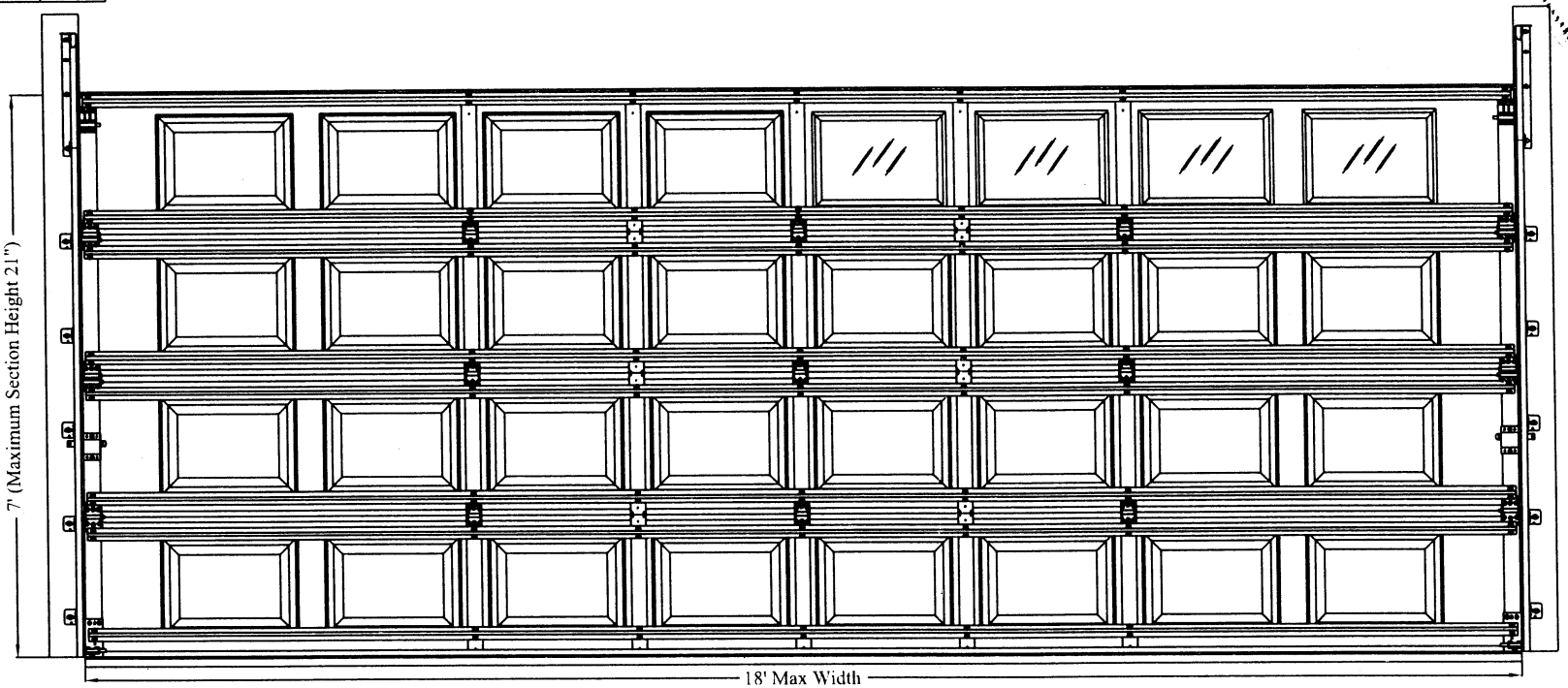
Note: Additional door heights are available. Consult manufacturer for details.

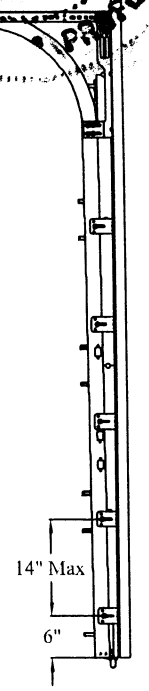
Track Brackets	
7'	8'
5	6

Note: Detail views are shown on sheet 2.

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
B	Removed long stem rollers, two screws per end stile	10/25/06	





Design pressures meet or exceed those required by ASCE 7-02 for the following conditions:

V = 130 MPH exposure category B and mean roof height of 30' or less
V = 110 MPH exposure category C and mean roof height of 30' or less

The use of the wind speeds shown is limited to those cases meeting all of the following additional conditions:

1. **Building category II**
2. **2 ft or less of the door width in the end zone of the building (zone 5)**
3. **Importance factor = 1.0**
4. **Topographic factor = 1.0**
5. **Directional factor = .85**
6. **Doors with glazed sections are not qualified for use in windborne debris regions**

Description: 400 series 2" open back steel garage door with optional polystyrene insulation (.019 min. pan)

Design Pressure: +25.7/-28.7
Test Pressure +38.6/-43.1

Tested per the applicable requirements of ANSI/DASMA 108-2002

DRAWN BY: John M. Stroede 10/25/06

APPROVED BY: John M. Stroede 10/25/06

doorLink Manufacturing, Inc.
1501 Taney St.
North Kansas City, MO 64116

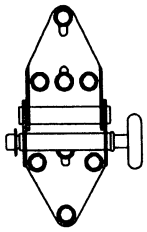
TITLE
Windload Rated Residential Garage Door
Models 410, 430, 450, 470

DRAWING NUMBER RO18B-130

REVISION B

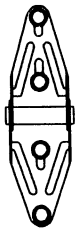
SIZE A **SCALE** N/A **SHEET** 1 of 2

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	Removed long stem rollers, two screws per end stile	10/25/06	JMS

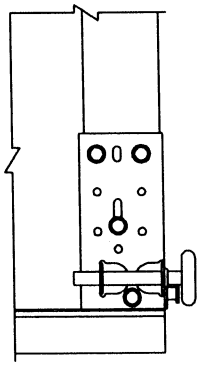


End Hinge
14 gauge galvanized steel end hinge attached with four 1/4" x 3/4" screws and four 1/4" x 5/8" self tapping screws

Roller
Minimum 7 ball steel roller or 10 ball nylon roller with 4" stem and push nuts on all hinge rollers



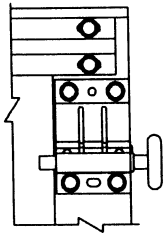
Center Hinge
18 gauge galvanized steel narrow or wide body hinge attached with four 1/4" x 3/4" screws



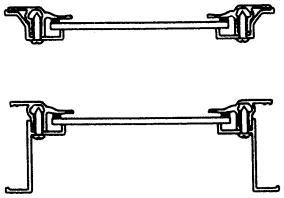
End and Center Stiles
20 gauge galvanized steel stiles attached to section with two rivets or two #8 x 1/2" pan head sheet metal screw on each end

Bottom Bracket
13 gauge galvanized steel bottom bracket attached with four 1/4" x 5/8" self-tapping screws (push nut not required on roller)

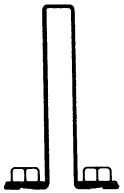
Bottom Weatherstrip
Aluminum extrusion with vinyl insert



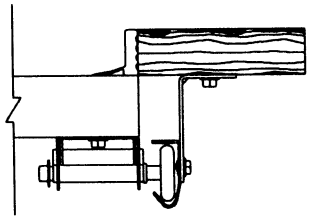
Top Fixture
16 gauge galvanized steel top fixture with two bolt roller carrier and attached to door with four 1/4" x 5/8" self-tapping screws (push nut not required on roller)



Windows (optional)
Plastic screw together window frame for either .100" acrylic or DSB glass with a maximum opening of 18" x 12 1/2"

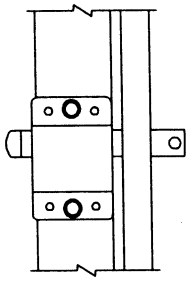


Struts
3" x 1 7/8" 16 gauge 33 ksi hat strut attached with two 1/4" x 5/8" self-tapping screws per stile

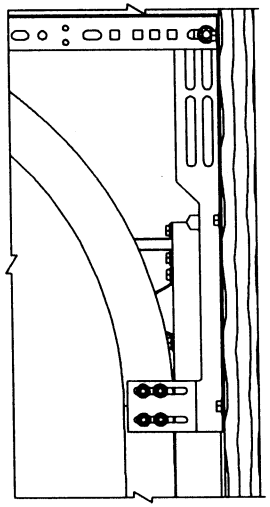


Wood Jambs
Vertical jambs are to be 2x6 #2 Spruce-Pine-Fir (S-P-F) or better depeding on regional availability
Note: Preparation of jambs by others, and supporting structural elements must be capable of withstanding the rated windload

Stop Molding
Stop molding is required, or door must overlap jambs by 1/4"



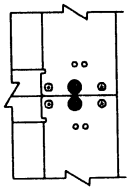
Locking Mechanism
Doors must have either an electronic operator or locking device installed (inside slide lock shown, other lock types permitted)
Note: Extension spring doors require locking point on each side if no electronic operator is installed



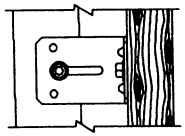
Flag Bracket
12 gauge galvanized steel flag bracket attached to wood jamb with three 5/16" x 1 5/8" wood lag screws and to the horizontal and vertical tracks with two 1/4" x 3/4" track bolts and nuts each

Horizontal Track and Angle
Horizontal track and angle to suit with suitable back hang

Vertical Track
2" galvanized steel track with a minimum thickness of .067"



End Stile
Each end stile requires a total of two #8 x 1/2" pan head screws located as shown between the pop rivets at the top and bottom of the stile



Track Brackets
2 1/4" wide x 12 gauge galvanized steel track bracket attached to wood jamb with one 5/16" x 1 5/8" wood lag screw and to vertical track with one 1/4" x 3/4" track bolt and nut
Note: Center distance between track brackets not to exceed 14"

JOSEPH H. DIXON, JR. LICENSE NO. 57768 STATE OF FLORIDA PROFESSIONAL ENGINEER

doorLink Manufacturing, Inc.
1501 Taney St.
North Kansas City, MO 64116

TITLE
Windload Rated Residential Garage Door
Models 410, 430, 450, 470

DRAWN BY: John M. Stroede 10/25/06	DRAWING NUMBER RO18B-130		REVISION B
APPROVED BY: John M. Stroede 10/25/06	SIZE A	SCALE N/A	SHEET 2 of 2