Ranger

The Comunello telescoping gate system.

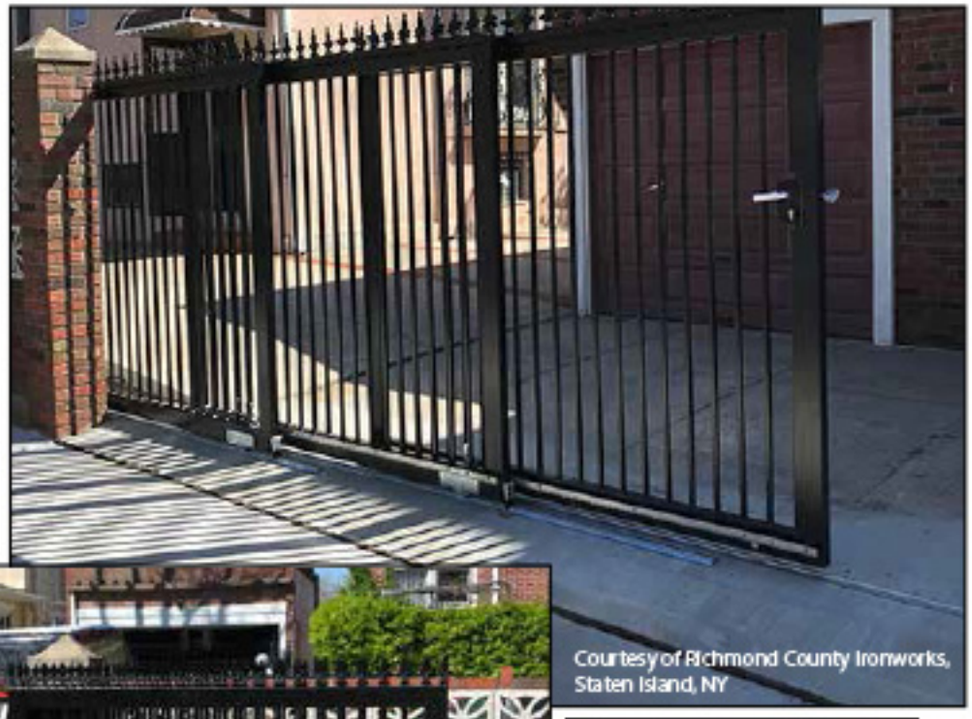
- Up to 40ft opening requiring only 15ft of space to slide into
- Low maintenance
- Maintains precision
- No unsightly cables

Manufactured by
COMUNELLO
LIFE MADE EASY

The Ranger telescoping system uses an innovative ground mounted rack track to drive a second leaf from the first. This track transmits movement using a system of hidden pinions that connect to the side gear rack, driving the next leaf. The simplicity of the Ranger system ensures that it is easy to install, performs reliably, and requires little maintenance. No cables are used so there is no stretching and no regular adjustments are needed. The rack track is brushed clean on every opening by the two cleaning brushes installed on the front and back of each gate leaf.

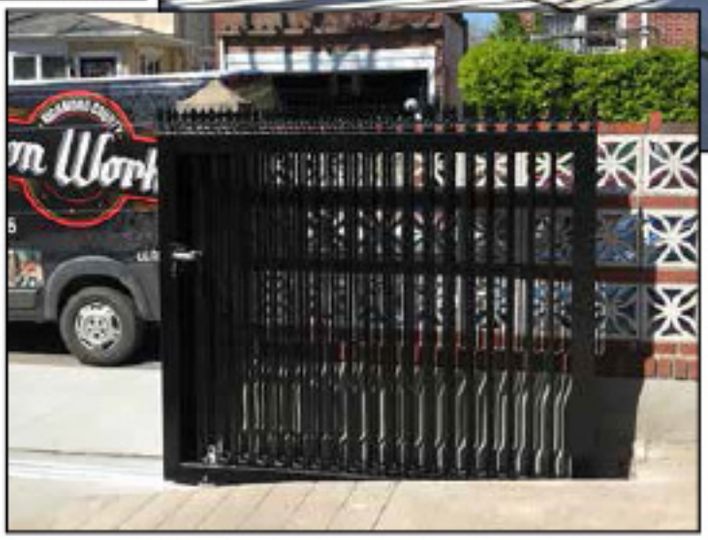
Watch a video for more information.

TELESCOPING SLIDING GATE SYSTEM PROJECTS



Courtesy of Richmond County Ironworks, Staten Island, NY

Watch the client video



Courtesy of RBJ Welding, Walanae, HI

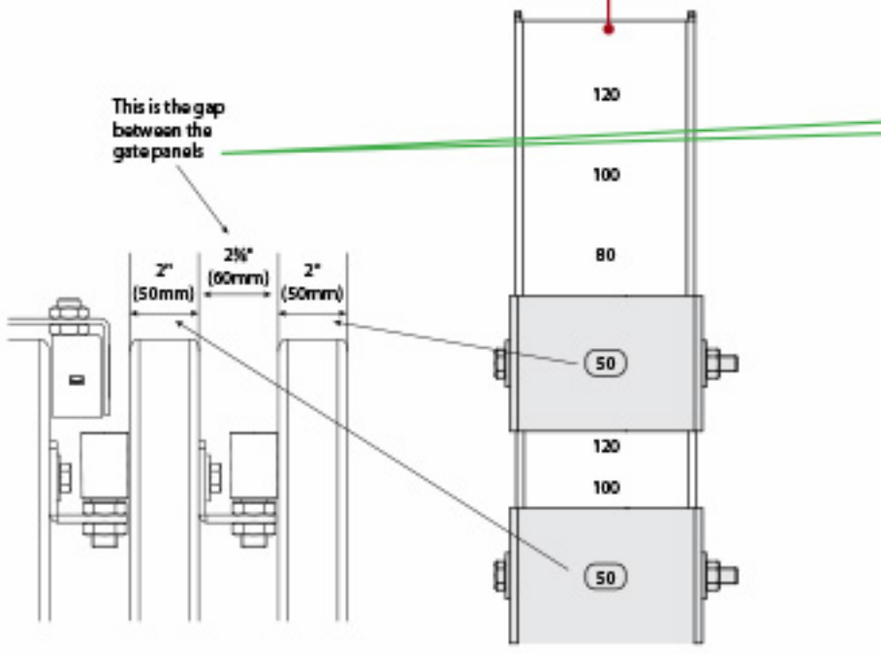
Watch the client video

RANGER TELESCOPING SLIDING GATE SYSTEM

Ranger features:

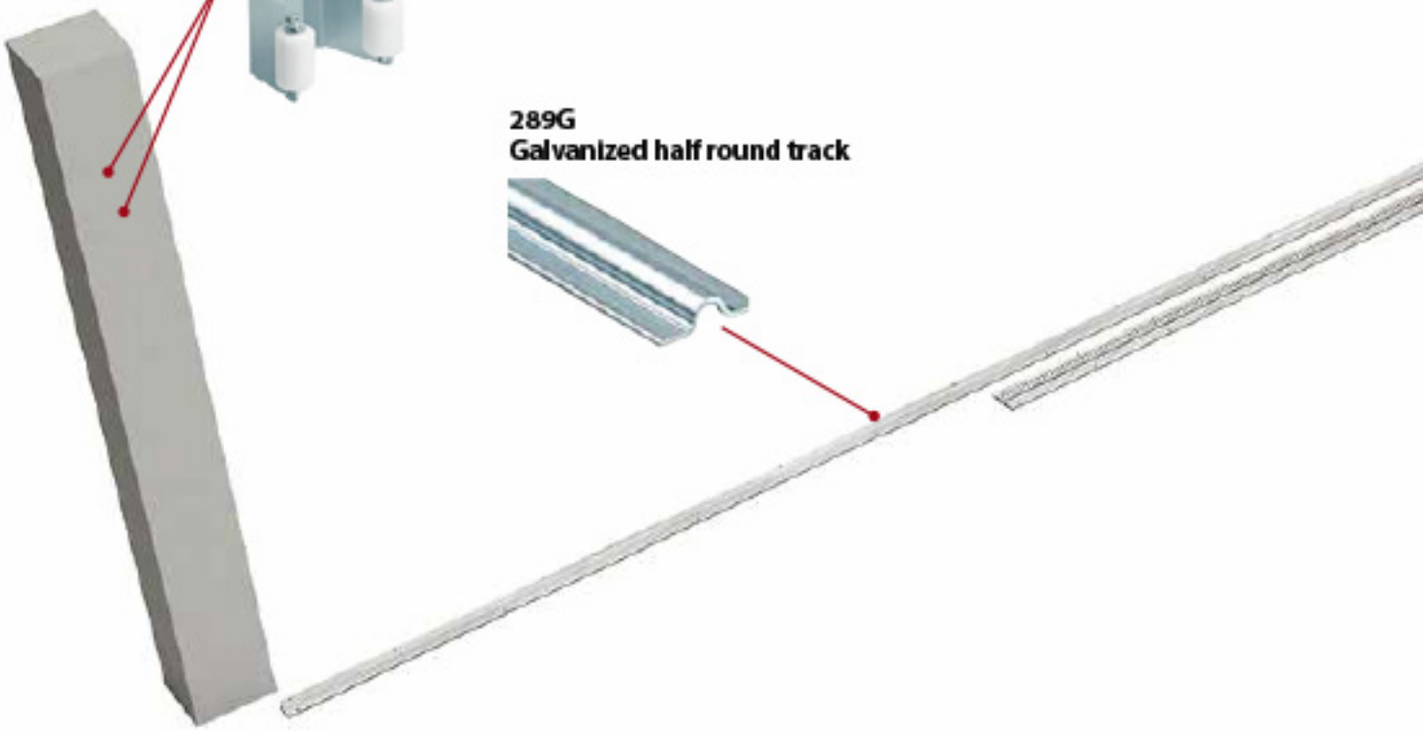
- 2 leaf telescoping system —Max Gate Leaf 14'4" and 880 lbs.
- 3 leaf telescoping system —Max Gate Leaf of 14'7" and 440 lbs.
- Durable galvanized and zinc coated steel hardware
- Large gate opening possible for compact spaces
- Precise, high quality, ground-mounted rack driven track system
- Cableless rack and pinion transmission of movement between the leaves

The **RG-10P template guide** sets the spacing between the gate panels at 2-3/8" (60mm) for proper spacing alignment for the top guide wheels and drive rack and pinion combination. Set the template guide to 50 for 2" gate profiles as shown. ***See page 446 for more information.***



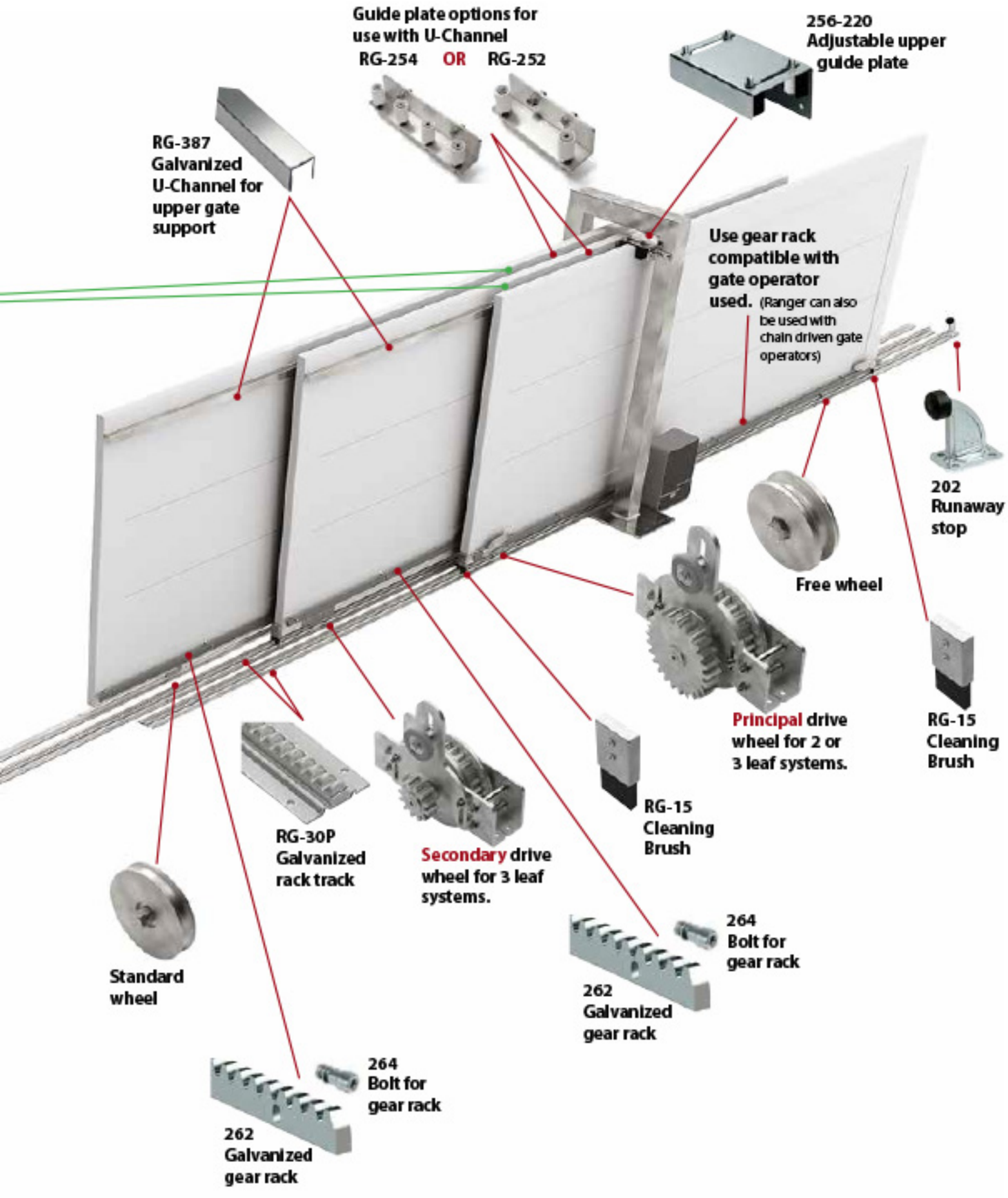
CG-15M
Adjustable mounting bracket

CG-30M
Gate receiver



289G
Galvanized half round track

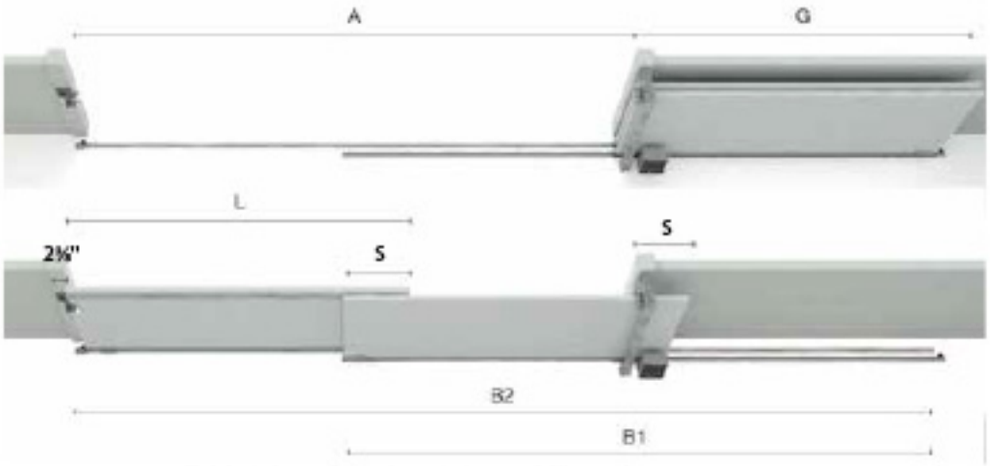
RANGER TELESCOPING SLIDING GATE SYSTEM



RANGER TELESCOPING SLIDING GATE **2 LEAF KIT**

Ranger Kit
RG2-120-50

Configurator for
2 leaf gates
- **Fits 2" x 4" frame**
- 880 pounds per leaf maximum
- 26ft maximum opening



GATE FORMULAS

S = Gate Overlap
Minimum is 14"

Gate Leaf Length
L (in) = (A + **2.5**) ÷ 2 + S

Min Space when Open
G (in) = L + **8**

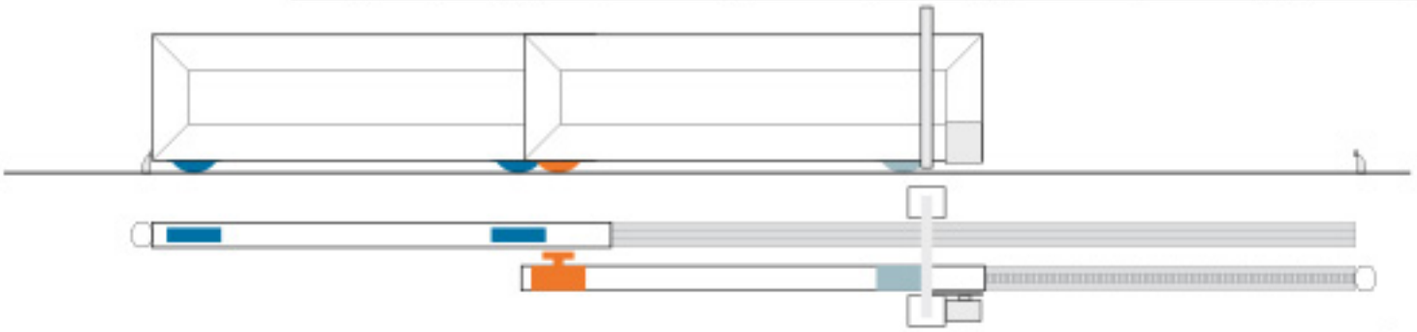
Rack Drive Track Length
B1 (in) = L x 2 - S

Half Round Track Length
B2 (in) = L x 3 - (S x 2)

Note: The parameters in **BOLD** in the formulas above are inches.

Table is based on the minimum 14" overlap.

Opening Width A (ft)	Gate Leaf Length L (ft)	Minimum Clear Space on Open Side G (ft)	Rack Track Length Item RG-30 B1 (ft)	Half Round Track Length Item 289 B2 (ft)
6	4'4"	5'	7'6"	10'8"
8	5'4"	6'	9'6"	13'9"
10	6'4"	7'	11'6"	16'9"
12	7'4"	8'	13'6"	19'9"
14	8'4"	9'	15'6"	22'9"
16	9'4"	10'	17'6"	25'9"
18	10'4"	11'	19'6"	28'9"
20	11'4"	12'	21'6"	31'9"
22	12'4"	13'	23'6"	34'9"
24	13'4"	14'	25'6"	37'9"
26	14'4"	15'	27'6"	40'9"



2 LEAF KIT | **Opening Range: 26ft max • Weight: 880lbs per leaf max**

WHEELS

RG2-120-50
1 drive wheel
1 free wheel
2 standard wheels with half-round groove

TRACK

RG-30P
Galvanized Rack Track
6'6" sections
Use table above to calculate track needed by using (B1)

289G-19.68FT
289G-9.84FT
Galvanized Half Round Track
Use table above to calculate track needed by using (B2)

291
Connection Pin

RACK

262
Galvanized Gear Rack
3'3" sections

266
Gear rack connection to screw rack to gate

264
Gear rack connection to weld rack to steel gate

(3 connectors are needed per 3'3" section of gear rack)

Ranger Kit RG3-120-50

Configurator for
3 leaf gates

- **Fits 2" x 4" frame**
- 440 pounds per leaf maximum
- 40ft maximum opening

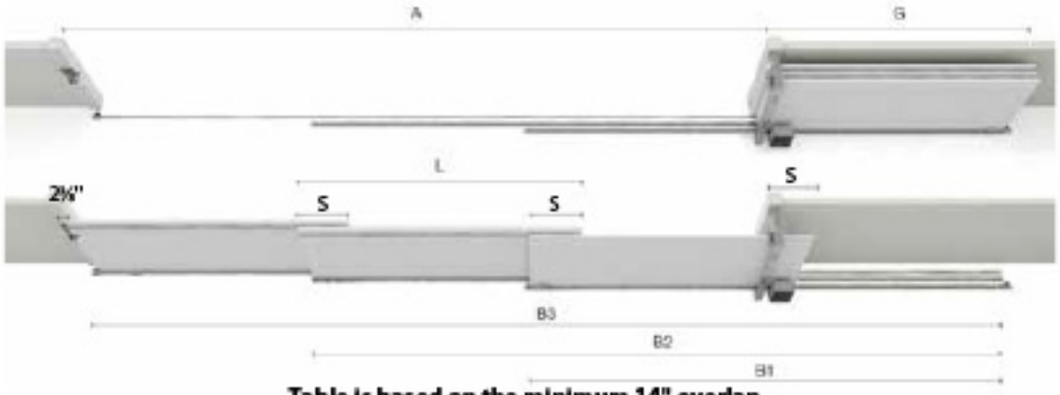


Table is based on the minimum 14" overlap.

Opening Width A (ft)	Gate Leaf Length L (ft)	Minimum Clear Space on Open Side G (ft)	Rack Track Length Item RG-30 B1 (ft)	Rack Track Length Item RG-30 B2 (ft)	Half Round Track Length Item 289 B3 (ft)
6	3'3"	3'11"	5'4"	7'5"	9'9"
8	3'11"	4'7"	6'8"	9'5"	12'5"
10	4'7"	5'3"	8'	11'5"	15'1"
12	5'3"	5'11"	9'4"	13'5"	17'9"
14	5'11"	6'7"	10'8"	15'5"	20'5"
16	6'7"	7'3"	12'	17'5"	23'1"
18	7'3"	7'11"	13'4"	19'5"	25'9"
20	7'11"	8'7"	14'8"	21'5"	28'5"
22	8'7"	9'3"	16'	23'5"	31'1"
24	9'3"	9'11"	17'4"	25'5"	33'9"
26	9'11"	10'7"	18'8"	27'5"	36'5"
28	10'7"	11'3"	20'	29'5"	39'1"
30	11'3"	11'11"	21'4"	31'5"	41'9"
32	11'11"	12'7"	22'8"	33'5"	44'5"
34	12'7"	13'3"	24'	35'5"	47'1"
36	13'3"	13'11"	25'4"	37'5"	49'9"
38	13'11"	14'7"	26'8"	39'5"	52'5"
40	14'7"	15'3"	28'	41'5"	55'1"

GATE FORMULAS

S = Gate Overlap
Minimum is 14"

Gate Leaf Length
L (in) = (A + **2.5**) ÷ 3 + S

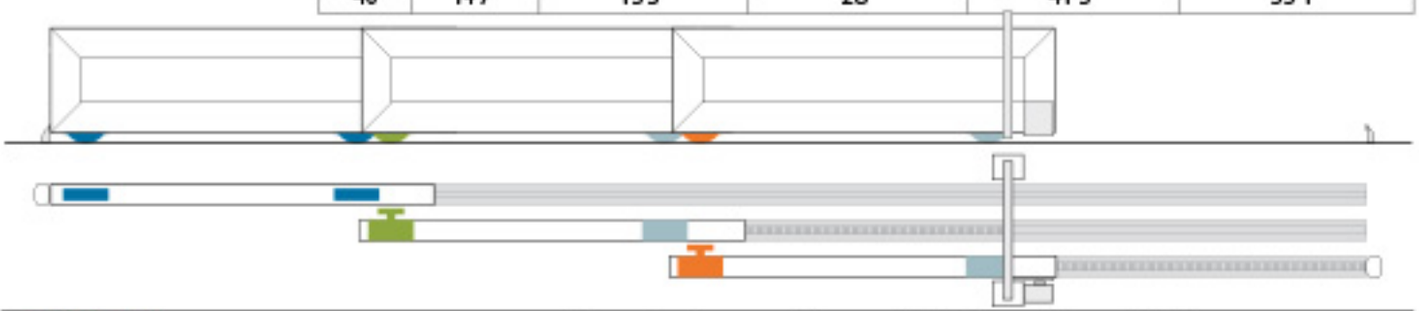
Min Space when Open
G (in) = L + **8**

Rack Drive Track Length
B1 (in) = L x 2 - S

Rack Drive Track Length
B2 (in) = L x 3 - (S x 2)

Half Round Track Length
B3 (in) = L x 4 - (S x 3)

Note: The parameters in **BOLD** in the formulas above are inches.



3 LEAF KIT | **Opening Range: 40ft max • Weight: 440lbs per leaf max**

WHEELS

RG3-120-50
1 drive wheel
1 drive wheel with low gear ratio
2 free wheels
2 standard wheels with half-round groove

TRACK

RG-30P
Galvanized Rack Track 6'6" sections
Use table above to calculate track needed by adding (B1) and (B2)

289G-19.68FT / 289G-9.84FT
Galvanized Half Round Track
Use table above to calculate track needed by using (B3)

291
Connection Pin

RACK

262
Galvanized Gear Rack
3'3" sections

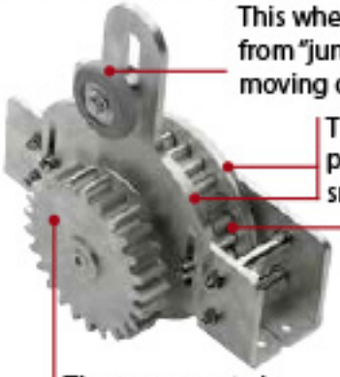
266
Gear rack connection to screw rack to gate

264
Gear rack connection to weld rack to steel gate

(3 connectors are needed per 3'3" section of gear rack)

KIT COMPONENTS

Principal drive wheel for 2 or 3 leaf systems

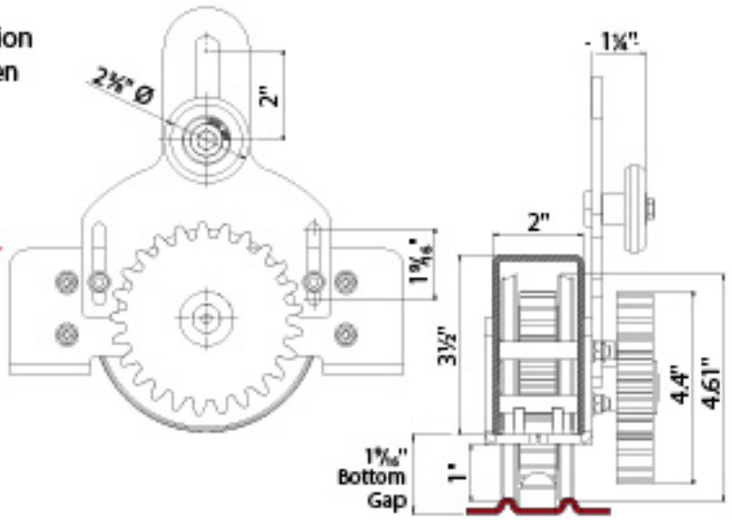


This wheel helps to keep the drive pinion from "jumping" out of the rack rail when moving down the track.

The wheel sits on two external profiles of the rack track for a smoother movement.

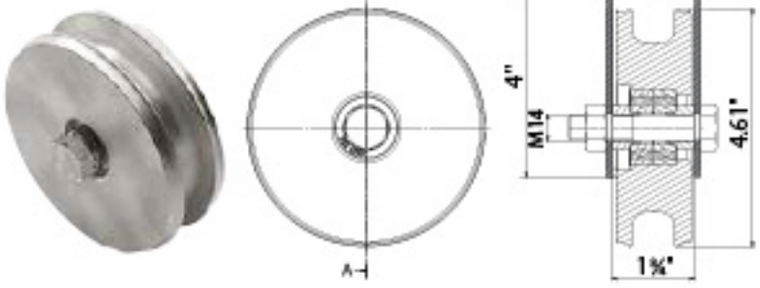
Wheel unit is made up of a principal pinion drive wheel, that when rolling on the rack track, generates the rotation of the external secondary pinion.

The movement via the second external pinion is transmitted to the rack mounted onto the side of the second gate leaf.



Free wheel

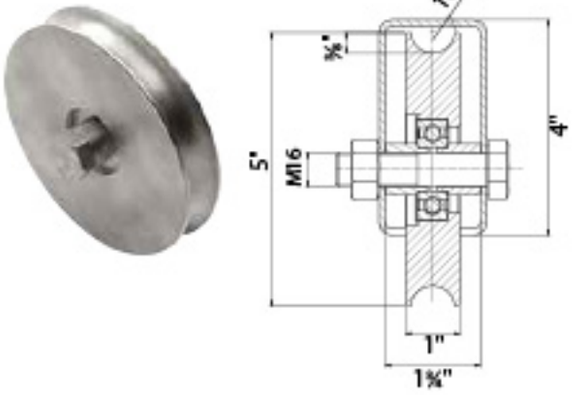
The wheel rides on two external profiles of the track for so the gears in the track and pinion do not bind for a smoother movement.

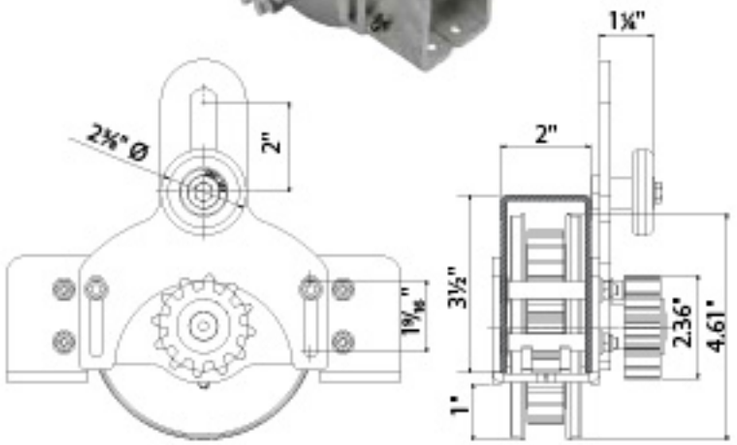


Secondary drive wheel for 3 leaf systems.

Standard wheel with half round groove

The wheel rides on the half round track.

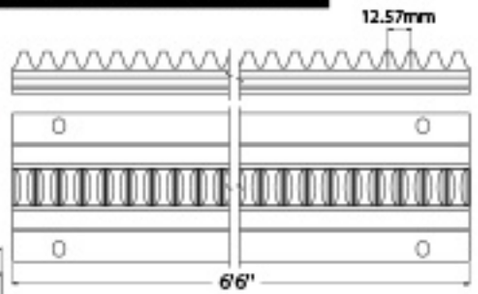




RANGER TELESCOPING SLIDING GATE ACCESSORIES

GROUND TRACK - CONNECTOR PIN - BRUSHES

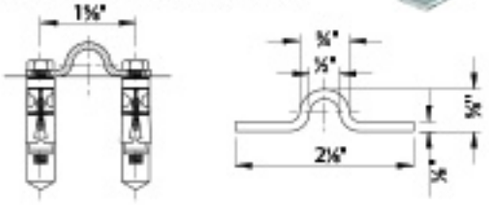
RG-30P
Galvanized rack track
6'6" sections



Movement is generated by the ground mounted rack that also functions as a track.

The rack track is equipped with two side guides on which the drive and free wheel sits. This is to ensure that the weight of the gate is not loaded on the rack and/or pinion teeth.

289G-19.68FT
289G-9.84FT
Galvanized half round track

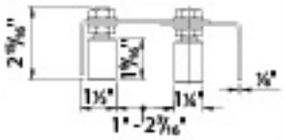


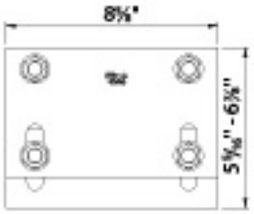
291
Connection Pin

RG-15
Cleaning Brush, 2 per gate.
To be used with Rack Track (RG-30P)

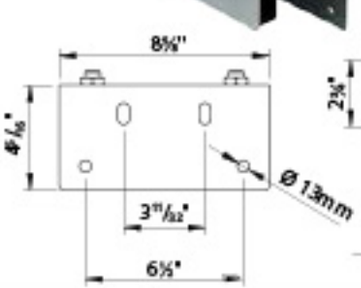
UPPER GUIDES FOR 1ST LEAF

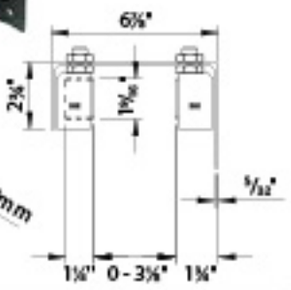
255-220-C - For 1¼" - 2⅜" frames





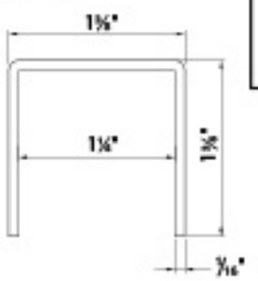
256-220
For up to - 3⅛" frames





UPPER GUIDES FOR 2ND & 3RD LEAVES

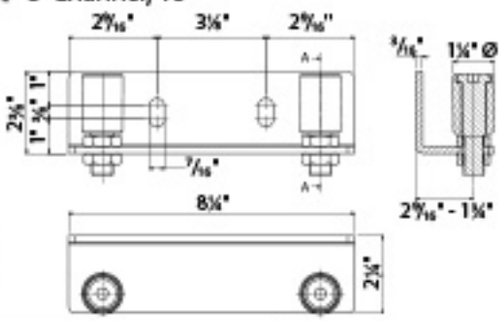
RG-387-19.68FT
Galvanized 1¼" U-Channel, 19'8"
RG-387-9.84FT
Galvanized 1¼" U-Channel, 9'10"
CG-237-20FT
Aluminum 1½" U-Channel, 20'
CG-237-10FT
Aluminum 1½" U-Channel, 10'

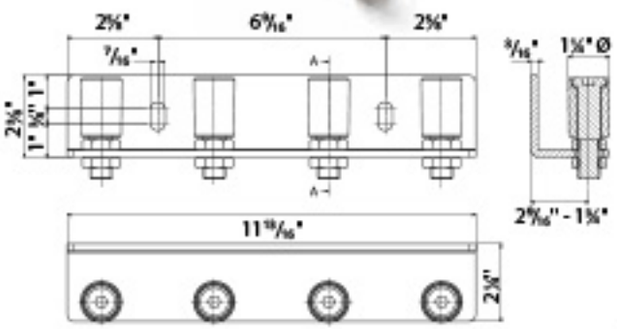


RG-254
Guide plate for use with U-Channel

Comunello recommends this guide for added stability with changing wind speeds and smoother rolling gates.

RG-252
Guide plate for use with U-Channel





RECEIVER BRACKETS

CG-15M
Adjustable mounting bracket

CG-30M
Gate receiver, 2" - 3" frame

Top cup gate receiver w/shock absorber
199-50 - 2" ID
199-60 - 2⅜" ID

GATE STOPS

202
Runaway stop
Mounted via screws

202F-A
Damped runaway stop. Mounted via screws.

ADAPTER

CG-58
Drive Shaft Coupling. Use when connecting a gate operator to the principal drive wheel.

RANGER TELESCOPING SLIDING GATE ACCESSORIES

GATE AUTOMATION SPEED REDUCTION

RG-40
Ranger speed reduction system

Highly recommended for 3 leaf systems

The RG-40 speed reducer cuts the speed of the first panel by 50%, to reduce the speed of 2 or 3 leaf Ranger telescoping gates. The gear box is mounted to the pad and connected directly to the rack on the first leaf. The motor is then coupled using the CG-58 adapter, directly to the speed reduction system drive shaft. Telescoping systems move twice or three times the speed of single gates, so reducing the speed of the leading edge is critical for safety.

RG-45
Electromechanical limit switch

The RG-45 switches replace the limit switches that come with the gate operator. As the gate operator is moved back from the gate by several inches to fit the RG-40, the typical limit switches may not attach or work easily.

Specs:
- NC Normally Closed contact
- IP 67 Rated Enclosure
- 12/24V DC

INSTALLATION TOOLS

Templates are purchased once and can be reused for subsequent installations.

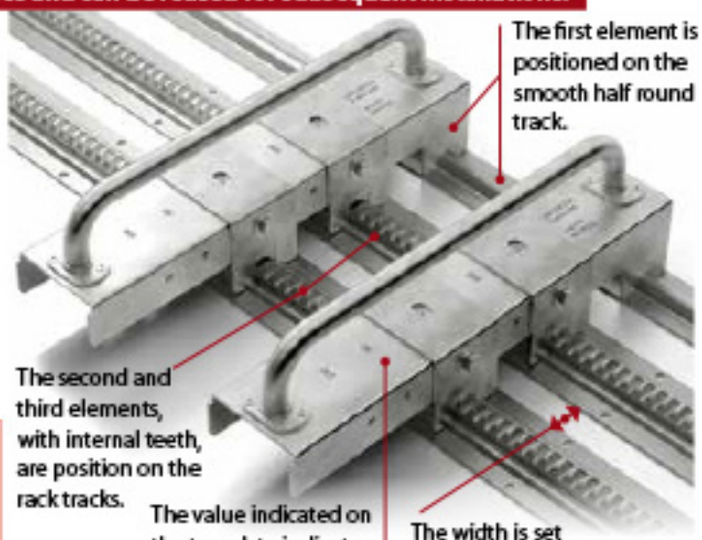
RG-10P
2 template guide kit for Rack Track Installation

These alignment guide tools ensure a rapid and precise installation of the rack tracks that make up the 2 and 3 leaf telescoping systems. The smooth half round track (#289) is installed first, and is used as the reference for the proper parallel placement and alignment of the rack tracks. The two alignment guide tools are used to maintain the correct spacing between the tracks, according to the gate frame width value selected on the tools. These guides also ensure that the rack teeth are aligned and in sync when connecting additional rack track sections together.

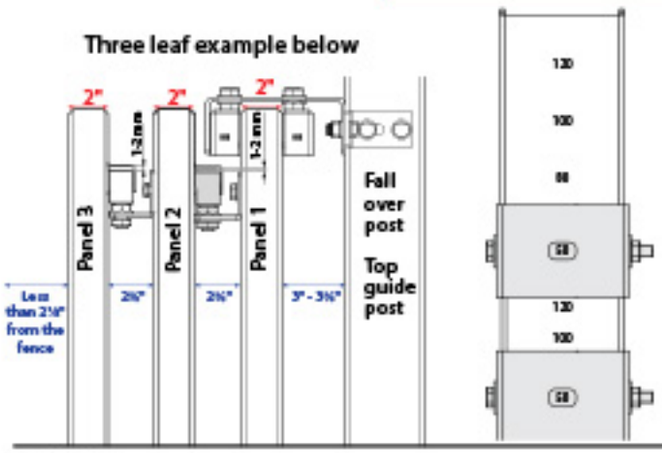
GATE FOOTPRINT:
Two leaf systems take approx. 11" of space

Three leaf systems take approx. 15-1/2" of space

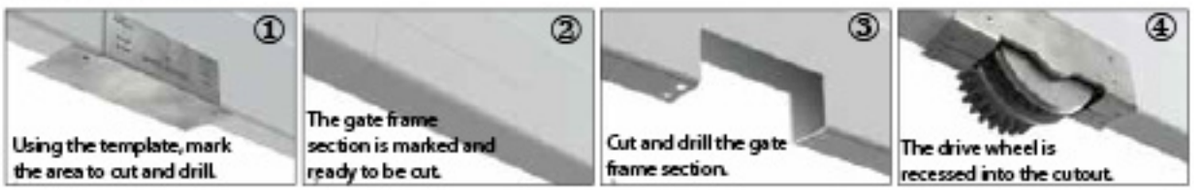
This template guide sets the s pacing between the gate panels at 2-3/8" (60mm) for proper spacing alignment for the top guide wheels and drive rack and pinion combination. Set the template guide to 50 for 2" gate profiles as shown.



Three leaf example below



The rack track installation templates are used to ensure a precise and parallel alignment of the ground tracks, and can be width-regulated depending on the profile width of the gate frame tubing used in the construction of the gate. When joining two pieces of rack track, the precise position for the teeth can be achieved using the toothed element of the template guide, positioning it directly on the joint where the two pieces of track meet.

RG-20
2 template kit for wheel installation

Steps for installing the gate wheels in the frame.