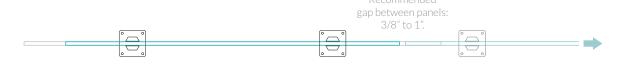
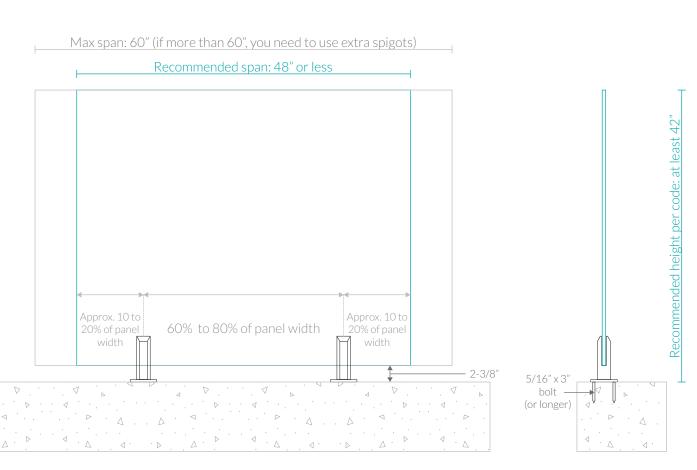
General Guidance for Spigot installation

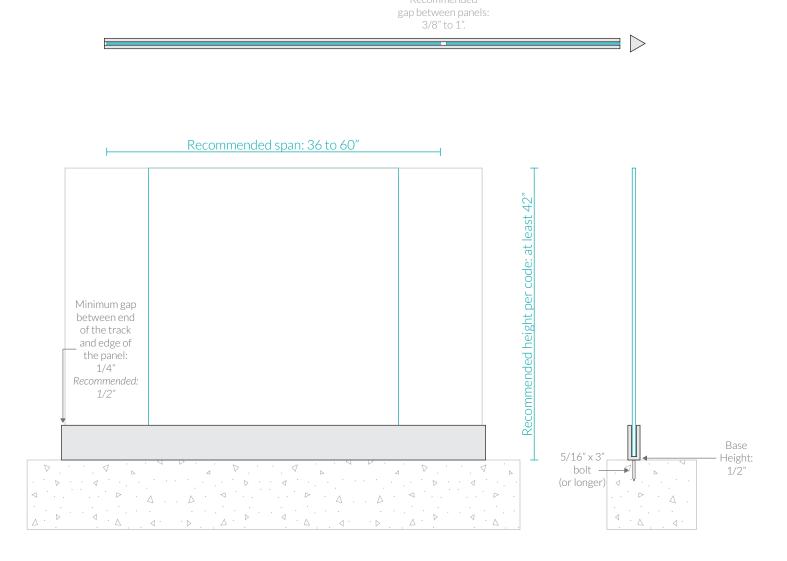
- 1) Max span will be 60" for a 42" high barrier, 48" for a 48" high barrier, and 36" for a 60" high barrier;
- 2) Recommended space or gap between panels can vary from 3/8" to an inch. LA Railings, as a company standard, uses a 5/8" space;
- 3) Maximum gap per code is 4", however, we don't recommend more than 1" because 1" or more of a gap will make a lot of connecting hardware (like clamps) not compatible.





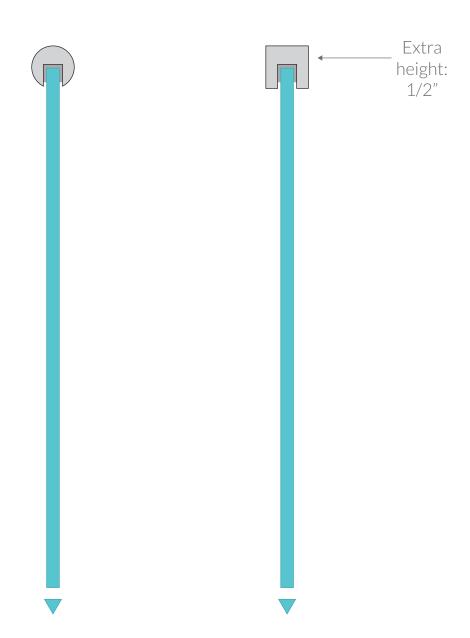
General Guidance for Slim base shoe track (U-channel) installation

- 1) Max height for this system: 48" (residential applications only);
- 2) Recommended space or gap between panels can vary from 3/8" to an inch. LA Railings, as a company standard, uses a 5/8" space;
- 3) Maximum gap per code is 4", however, we don't recommend more than 1" because 1" or more of a gap will make a lot of connecting hardware (like clamps) not compatible.;
- 4) Minimum gap between end of the track and edge of the panel: 1/4". Recommended: 1/2".



If Code-Compliant Top Cap Rail is included.

1) A Code-Compliant Top Cap Rail which is necessary in most cases, will add approximately 1/2" on top of the glass, so, you can deduct 1/2" out of the height of the glass you are ordering in order to reach the height you are aiming.

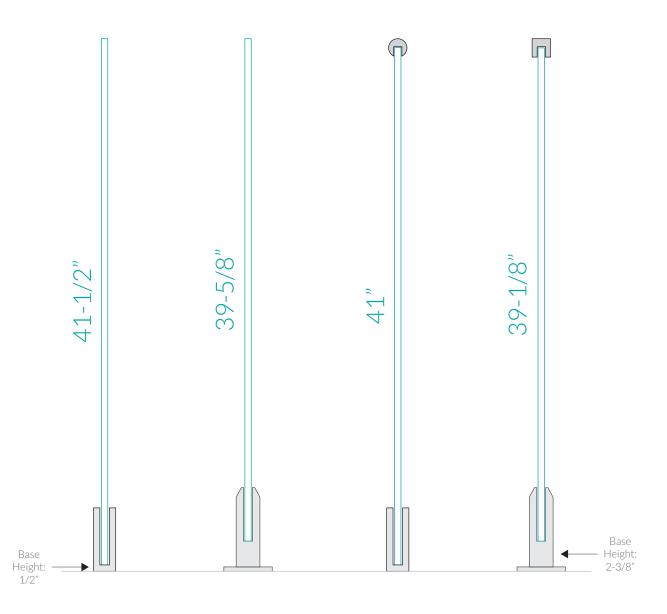


© LA Railings.com Page 3 of 20

General suggestion for panel heights according to the situation.

This is for you to get a 42" total height guardrail. Please make sure your project doesn't have slopes which might affect the heights of the overall project.

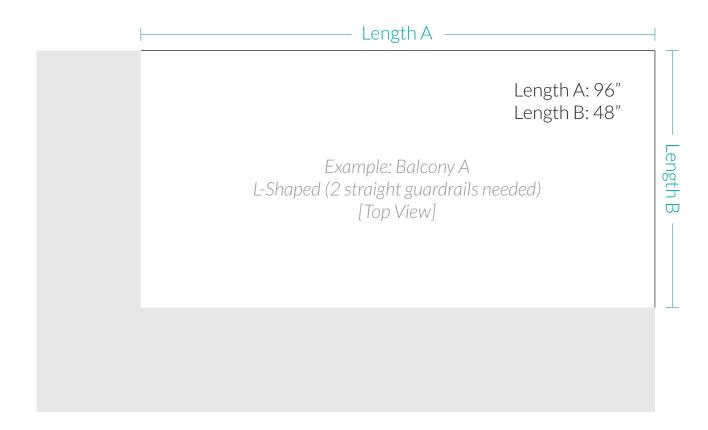
- 1) On a slim base shoe track (U-Channel) with no top cap rail: 41-1/2"
- 2) On a spigot base with no top cap rail: 39-5/8"
- 3) On a slim base shoe track (U-Channel) with a code-compliant top cap rail: 41"
- 4) On a spigot base with a codecompliant top cap rail: 39-1/8"



Measuring the overall lengths

1) You should measure the length of all the edges where you are planning to have your guardrails installed;

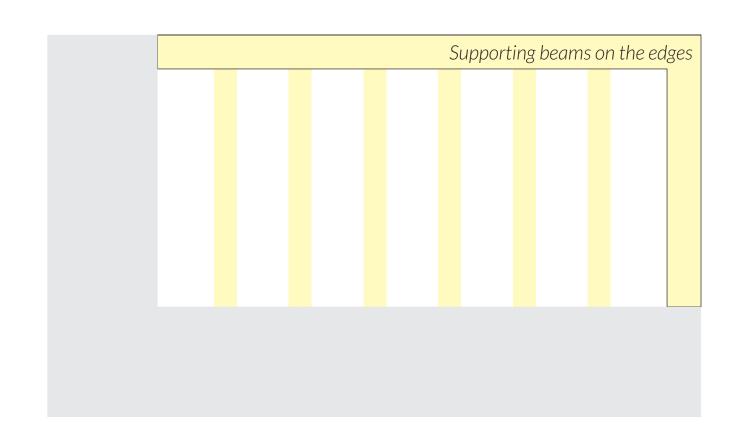
Important: Most areas are not leveled so you might face slopes on your areas so it's important to measure those (with angle finders) in order to adapt the measurements if needed. For advise on that, please get in touch with our team.



Checking the bases (1)

1) An important part of checking your area is to see if you'll have proper support to have safety guardrails installed. It's usually the case but double-checking is necessary. On a wood frame, you usually have supporting beams on the edges and those will also serve as a strong support for the guardrail bolts.

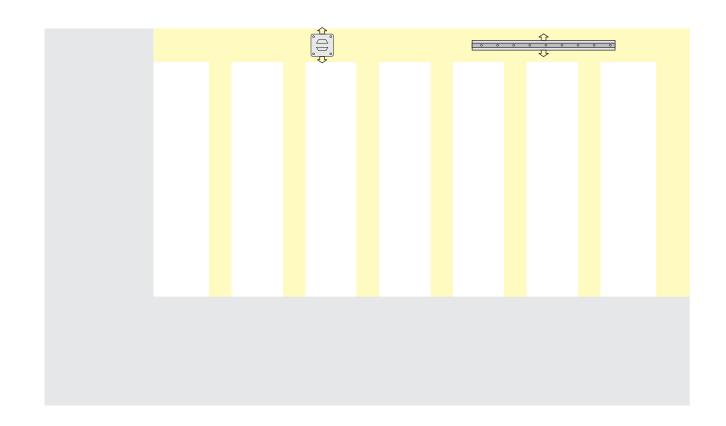
Depending on the circunstance, you might have to adjust the distance from the guardrail to the edge of the area to make sure the bolts will be installed on a proper and strong base.



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Page 6 of 20

Checking the bases (2)

2) Depending on the circunstance, you might have to adjust the distance from the guardrail to the edge of the area to make sure the bolts will be installed on a proper and strong base.



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Page 7 of 20

Getting the measurements for the panels (for Spigot Clamps)

As we mentioned earlier, the longer part of this balcony is 96".

Our recommended gap on each of the guardrail is 3/4", so the result will be 94-1/2".

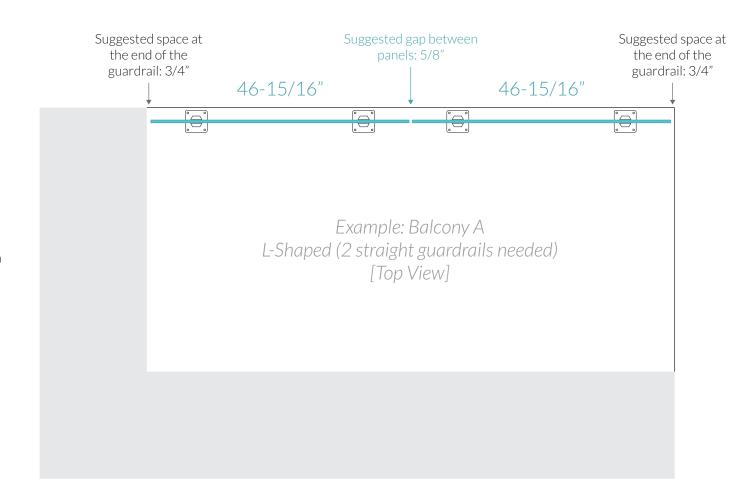
In how many glass panels can we divide a 94-1/2" guardrail considering the ideal 48" length for each panel (and no more than 60")? 2.

How many gaps we have between two panels? 1.

What's the size of the gap I should leave between the panels? 5/8" (our recommendation).

94-1/2" minus 5/8": 93-7/8";

93-7/8" divided by two? 46-15/16"



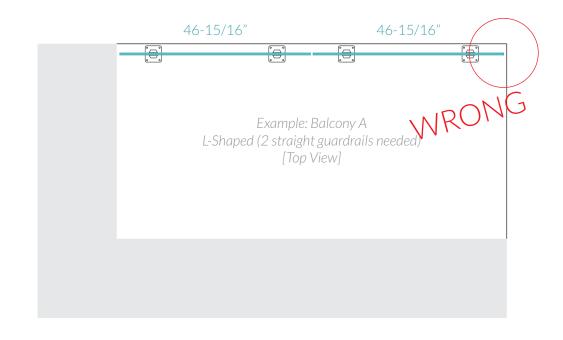
Calculating measurements on corners

The calculation on the previous page was wrong for that circunstance. Those lengths were not calculated considering the perpendicular guardrail that will "meet" that run in the corner.

That measurement would be perfect if you were considering a simple guardrail between walls for example (illustration below).

For the situation on the previous page (also shown on the illustration above), we need to also consider the perpendicular railings.

(continues on the next page)





Calculating measurements on corners - the right way (1)

Now you have to consider the length minus the whole width that the other run will use:

1/2" (distance from the edge to the spigot clamp);

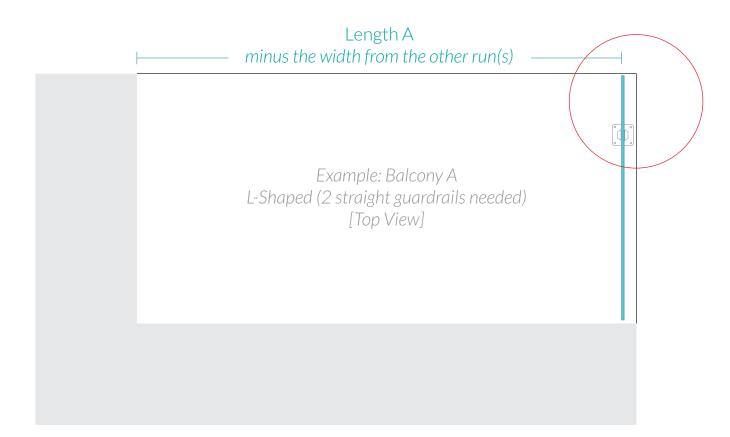
2" (half-width of the spigot clamp); 1/2" (thickness of the glass panel).

Total width: 3"

Length A (96") minus "the other run": 93"

New length: 93" Minus 3/4" at the end near the wall; Minus 1/2" when it meet the perpendicular panel at the other end: 91-3/4"

(continues on the next page)



Calculating measurements on corners - the right way (2)

(continuation)

New length considering the other run (per calculation from the previous page): 91-3/4"

How many panels we can do in 91-3/4" considering the ideal 48" length for panel (and no more than 60")?

2

How many gaps we have between two panels? 1

What's the size of the gap I should leave between the panels?

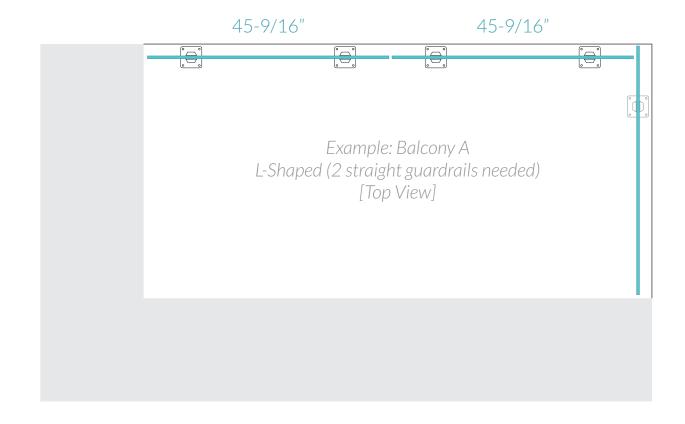
5/8" (our recommendation)

91-3/4" minus 5/8"?

91-1/8"

How much is 91-1/8" divided by two? **45-9/16"**

(continues on the next page)



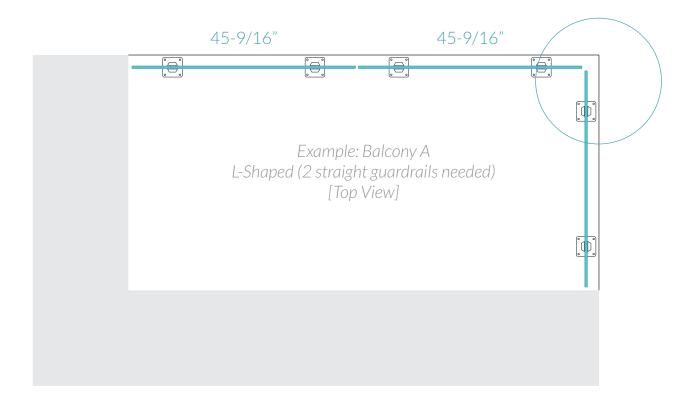
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Page 11 of 20

Calculating measurements on corners - the right way (3)

(continuation)

The same calculation should be made to each intersection on your guardrail system.

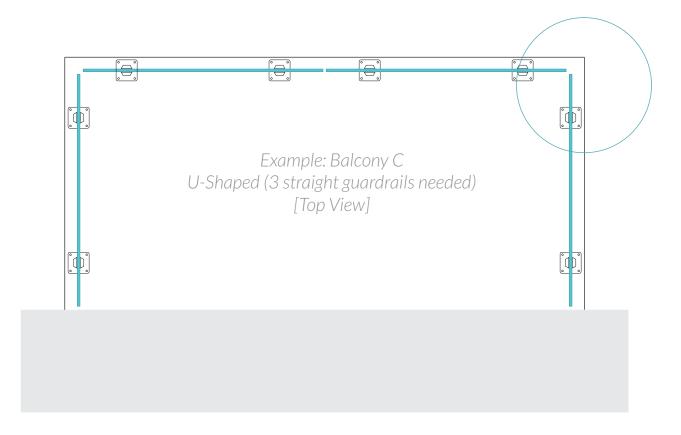
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Calculating measurements on corners - the right way (4)

(continuation)

Most cases you'll have to consider even two other lengths (or runs). An U-shaped balcony is a classic example.



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Getting the measurements for the panels

(for Slim Base Shoe Track or *U-Channel*)

The principles are the same as the ones explained earlier for the spigot clamps.

For the U-Channel track, we recommend cutting the track leaving 1/4" space or gap at each end:

Length A: 96" Minus 1/4" on each end: Length A-U: 95-1/2"

(continues on the next page)

Length A-U: 95-1/2"

Example: Balcony A L-Shaped (2 straight guardrails needed) [Top View]

Getting the measurements for the panels

(for Slim Base Shoe Track or *U-Channel*)

(continuation)

Panel length math: 95-1/2" minus 1/2" on each side: 94-1/2"

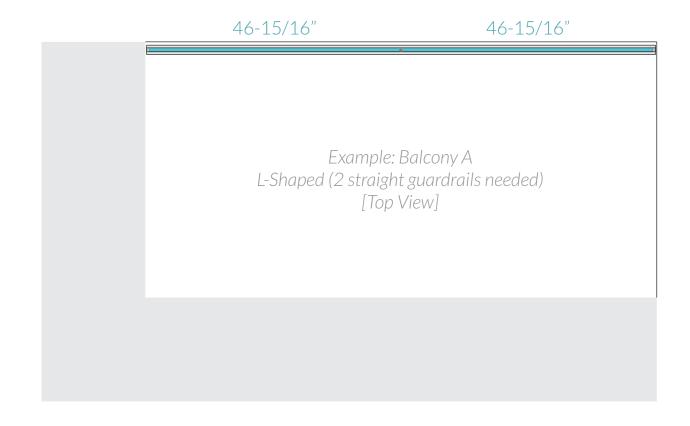
How many panels we can do in 94-1/2" considering the ideal 48" length for panel?

How many gaps we have between two panels?

What's the size of the gap I should leave between the panels? 5/8" (our recommendation)

94-1/2" minus 5/8"? 93-7/8"

How much is 93-7/8" divided by two? 46-15/16"



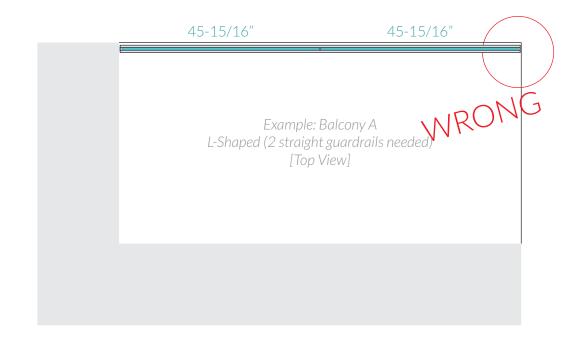
Calculating measurements on corners

The calculation on the previous page was wrong for that circunstance. Those lengths were not calculated considering the perpendicular guardrail that will "meet" that run in the corner.

That measurement would be perfect if you were considering a simple guardrail between walls for example (illustration below).

For the situation on the previous page (also shown on the illustration above), we need to also consider the perpendicular railings.

(continues on the next page)





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Page 16 of 20

Calculating measurements on corners - the right way

Length A: 96"

For the cut of the track (preferably done at the installation spot):

You need to consider the total length on one run and deduct the space needed for the perpendicular run.

Before proceeding, please check the available solutions for slim base shoe connection at corners on the next page.



Ways to join the slim base shoe track on corners

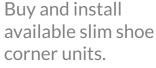
Please check the three options you'll have in order to get the tracks joined.

Mount the tracks next to each other.
(Doable but might

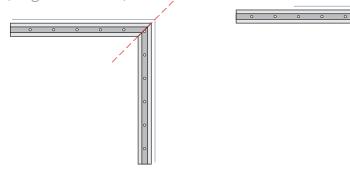
not be pleasant looking.)

Miter cut (at 45-degree angle) both tracks so the tracks can be joined.

(Will need proper tools and precise cutting for good results.)



(No miter cuts needed. The long pieces will be installed next to the corner unit.)



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Calculating measurements on corners - continuation

Now you have to consider the length minus the whole width that the other run will use:

1/2" (distance from the edge to the slim track);

1-3/4" (width of the slim track);

Total width: 2-1/4"

Length A (96") minus "the other run": 93-3/4"

New length: 93-3/4"

Minus 3/4" at the end near the wall; Minus 1/2" between the end of the track

and the glass (near the wall);

Minus 1/2" when it meet the perpendicular

panel at the other end:

92"

How many panels we can do in 92" considering the ideal 48" length for panel (and no more than 60")? **2**

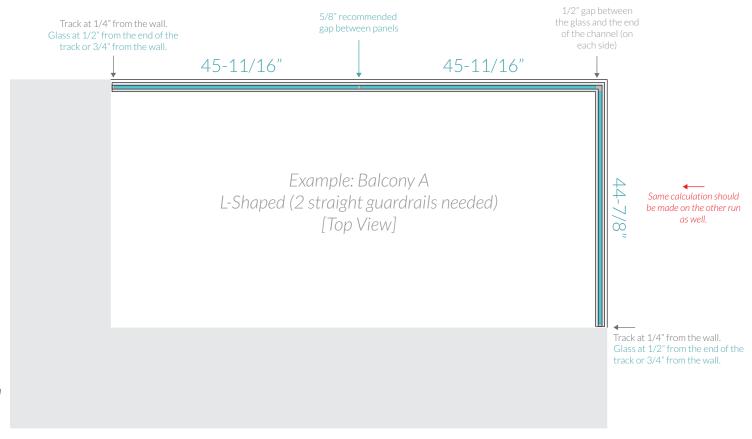
How many gaps we have between two panels? 1 What's the size of the gap I should leave between the panels? 5/8" (our recommendation)

92" minus 5/8"?

91-3/8"

How much is 91-3/8" divided by two?

45-11/16"

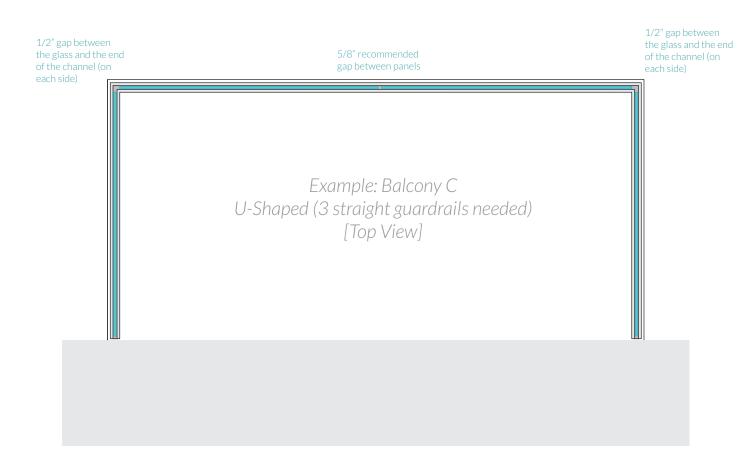


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Calculating measurements on corners

(continuation)

Most cases you'll have to consider even two other lengths (or runs). An U-shaped balcony is a classic example.



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Page 20 of 20