



CLOSET

HIGH-DENSITY HOUSING

Design Guide

2021

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Designers/Developers,

Thank you for taking a closer look at our Basis of Design options. We will use this design guide to show representations, pictures, drawings, blueprints of all options capable through our Magiglide BIFOLD closet doors. We will get into the customization options in terms of measurements and finishes, but we will also give architects/developers an in depth look at the thought process behind common blueprints that we see when doing takeoffs, as well as thoughtful solutions to some challenges in terms of compliance manufacturing constraints, or lack thereof. As well as using this design guide for closet options, we also offer specification editing as part of our white glove service here at Landquist & Son, Inc through our sales representative department. Contact us today with any questions regarding your design work.

We look forward to working with you in the future,

Inacy L. Koehler

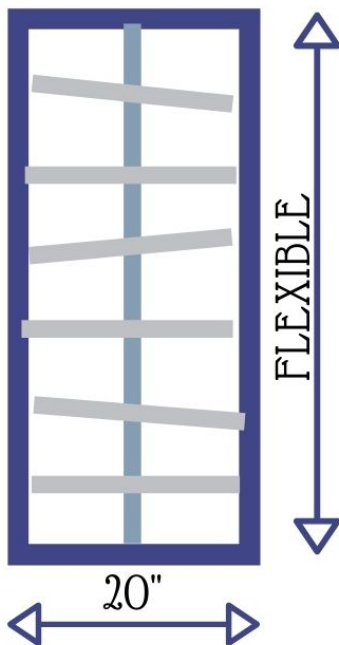
Sales Representative



Closet Depths

RECOMMENDED FLOOR PLANS

When designing in terms of closets, it is important to consider the purpose of the closet in order to make the best decision design for the depth recommended. Closets that are being designed for high density housing purposes typically appeal to the masses. Always keep in mind what designation R-2 housing development guidelines are required for closets being designed. (Type A, Type B, ADA. . etc)

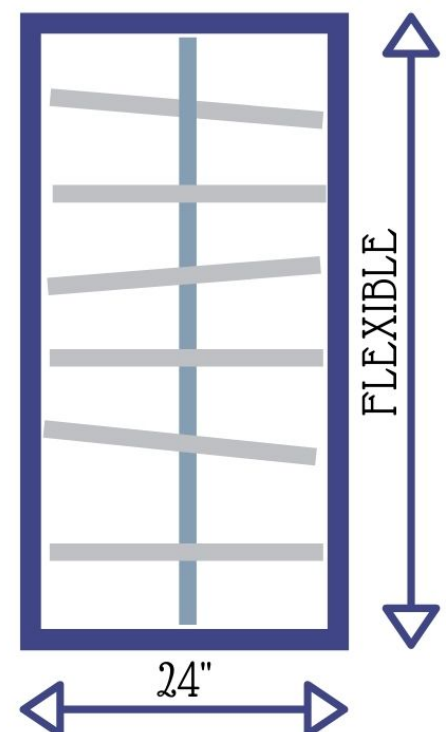


MINIMUM CLOSET DEPTH

We recommend allowing a depth of at least 20" in order to have capacity for typical clothes hangers. This will be the smallest depth possible unless the closet will not be holding hangers. (Example: kitchen pantry, linen, or a shoe closet) Also keep in mind, this will not be accommodating for larger items such as bulky sweatshirts or coats.

STANDARD CLOSET DEPTH

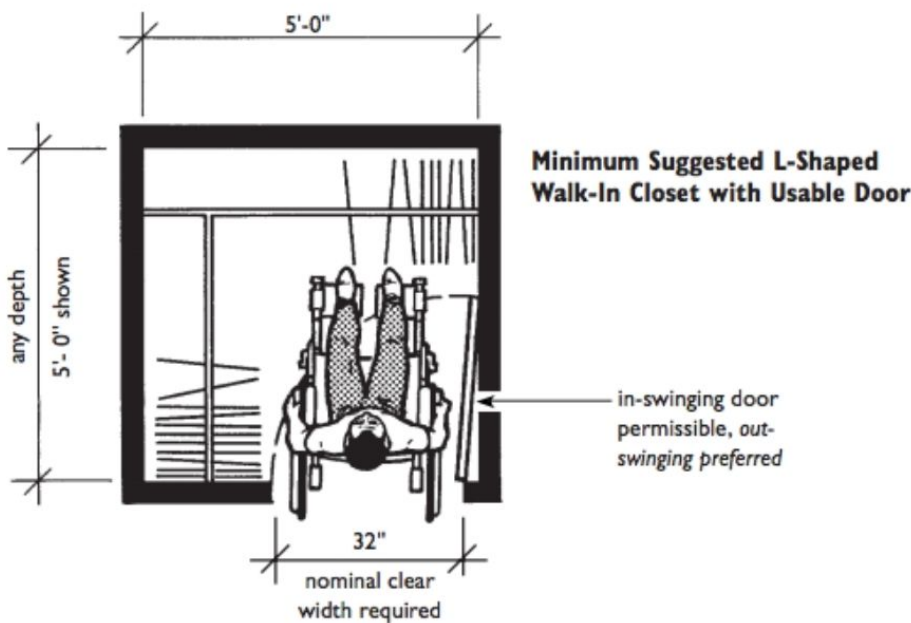
If you are designing a bedroom closet, the typical closet depth is 24". This is also what is required to comply with ADA standards. If a closet is 24" deep, then the clear span required for accessibility standards to remain compliant, is 32" clear at the opening.



Closet Depths

RECOMMENDED FOR WALK-IN CLOSETS

When designing in terms of walk-in closets for high density housing purposes, architects should keep Fair Housing Act or ADA requirements in mind for Accessible, Type A or Type B units for R-2 developments. Below highlights the guidelines in terms of walk-in closets.



If you are building an ADA compliant unit,
then make the closet 48" deep.

1004.3.1 is for Type B units

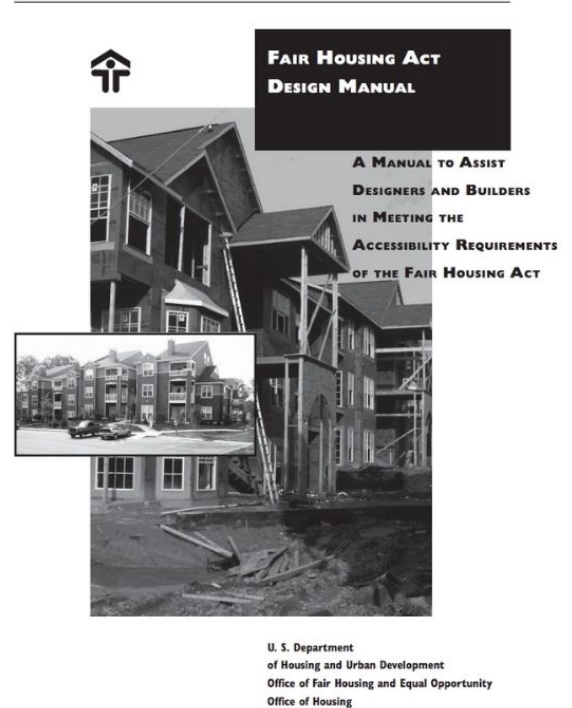
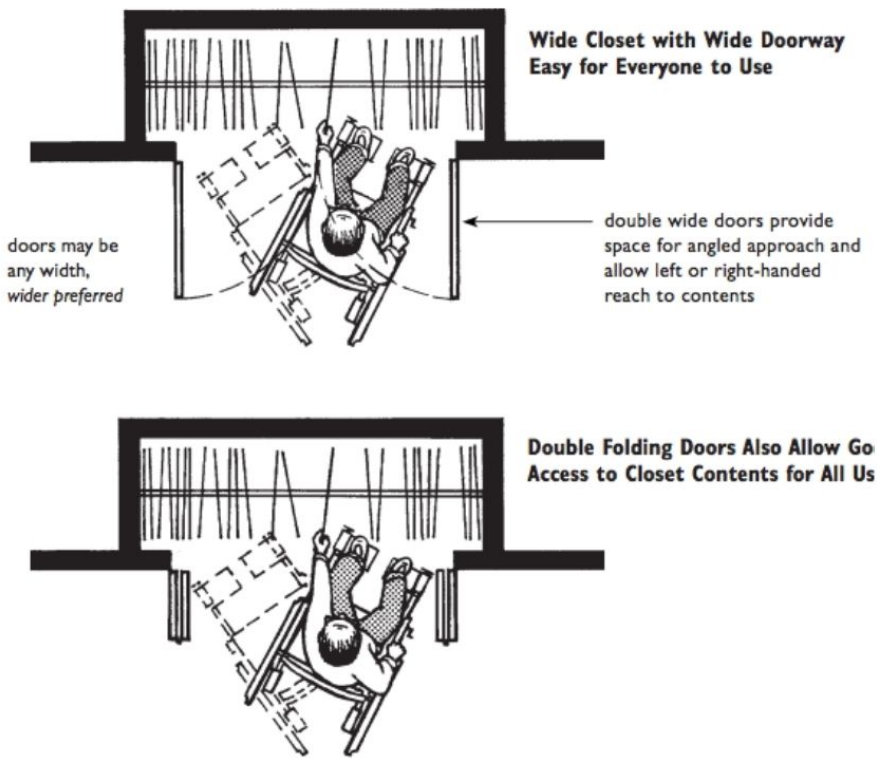
1004.3 Accessible Route. Accessible routes within Type B units shall comply with Section 1004.3.

1004.3.1 Location. At least one accessible route shall connect all spaces and elements that are a part of the unit. Where only one accessible route is provided, it shall not pass through bathrooms and toilet rooms, closets, or similar spaces. Agree with the others you have to be able to enter the room but the turning space is not required. FWIW minimum clear width in a kitchen is 40" might be logical for a WIC to be the same

Closet Widths

FOR HIGH DENSITY HOUSING FLOOR PLANS

Magiglide bifold closet doors provide an excellent option when following the Fair Housing Act manual shown below.



FAIR HOUSING ACT DESIGN MANUAL

If designing an R-2 type multifamily development, it is important to comply minimally with the Fair Housing Act guidelines. Take a look above at a few recommendations regarding closet design widths. The first states that a wide closet with a wide doorway is easy for everyone to use. Doors may be minimally 32 clear in terms of accessibility, but the wider the better. The second statement states that double folding doors (bifolds) also allow good access to closet contents. Folding doors allow for full clear span access space, without the need to be fighting with a door that will swing in the way, allowing for equal accessibility for all.

Closet Widths

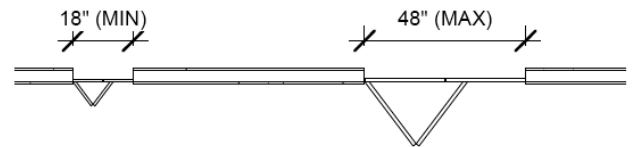
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FOR HIGH DENSITY HOUSING FLOOR PLANS

Magiglide bifold closet doors are all custom sized at no added costs. This means it is the same cost to hold a 36" wide closet opening as it is to be 37-3/4" wide. For this reason, we often will manufacture according to custom sizes throughout high rises. Over the next few pages, we will evaluate common bifold closet door blue prints, as well as our recommendation for these spaces.

2 PANEL BIFOLD

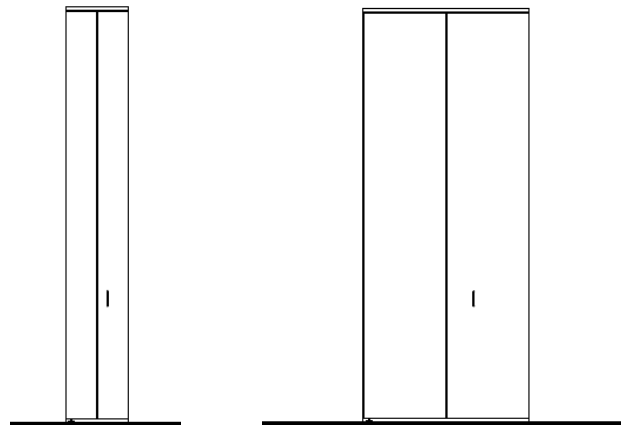
Magiglide 2-panel bifold closet doors, like the one shown here, can be designed with any configuration from 18" wide-48" wide, to the nearest 1/4". That means, that we manufacture this door in 18", 18-1/4", 18-1/2", 18-3/4" and so on. . all the way up to 48". Often, 2panel bifolds follow the standard mold of a 24", 30", 32" or 36" width, but this is not the case in terms of our Magiglide doors. Every closet opening of a high rise can be a different size, and it will NOT be an upcharge. The 2-panel bifold closet can be designed to be a left or right hand opening door, all custom to your space. As shown on Revit, the 18" minimum constraint has the bifold panels looking skinny, while the maximum constraint has the panels much larger.



Left-Hand



Right-Hand



Closet Widths

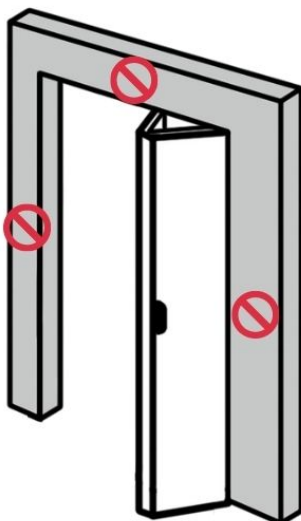
2 PANEL BIFOLD



DUPLICATE FLOOR PLANS

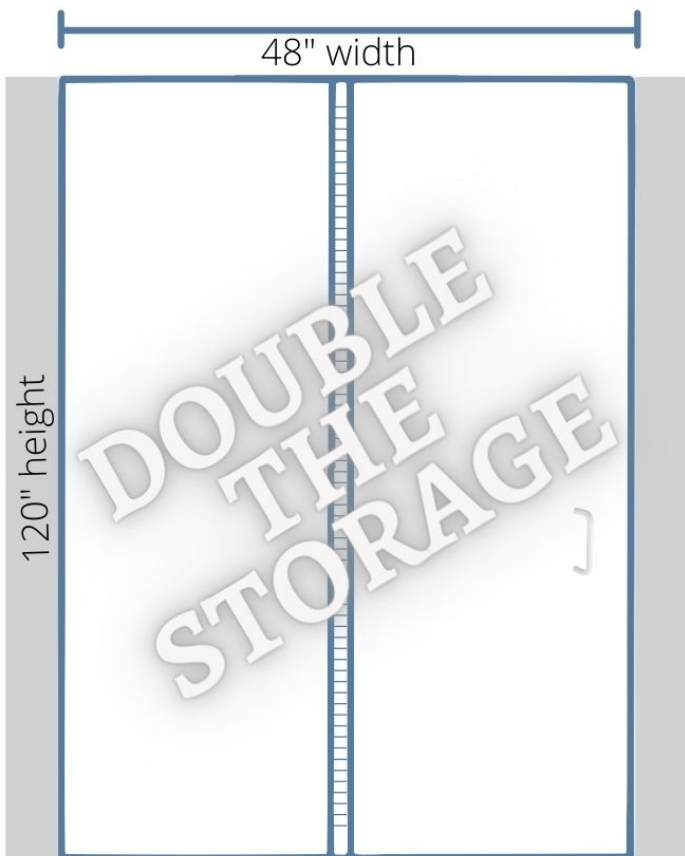
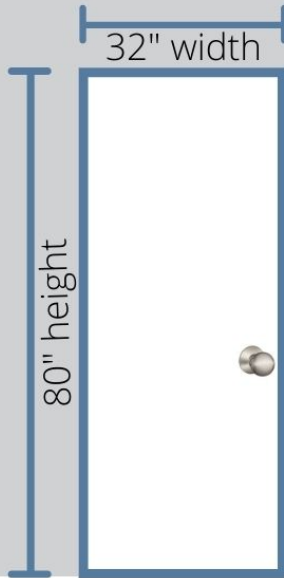
Taking a look at a duplicate floor plan, on the left and right, you can see where our estimators would suggest deleting stub walls. Often times, the only purpose of these areas surrounding closets are to make sure the closet door holds the width opening size to 30", 32", 34", or 36" wide. It makes more sense, if given the option, to get rid of those place holders, so tenants can utilize their space so much

more.



Double the Storage

PRE-HUNG VS. 2 PANEL BIFOLD



Closet doors are often an oversight, not something that many put much thought into when it comes to a project.

However, take a look at the figures below, to imagine just how much of a difference in terms of ACCESSIBLE storage, bifold closets can give tenants in lieu of the traditional pre-hung closet door. This figure on the left, is comparing a standard sized pre-hung closet to Magiglide bifold closet doors, maximum 2-panel width and height constraint. This is a 32" wide by 80" tall pre-hung closet door, being compared to a 48" wide by 120" tall 2-panel Magiglide bifold closet door. When calculating the amount of accessibility there will be a 1 inch subtraction from the 32" width of a prehung, to account for the thickness of the door when open. When calculating the amount of accessible storage in the bifold, there will be a 6.5" inch deduction on the width, to account for the clear span, when the bifold is open.

Results

PRE-HUNG: 17.2 FT

2 PANEL BIFOLD: 34.58 FT

Closet Widths

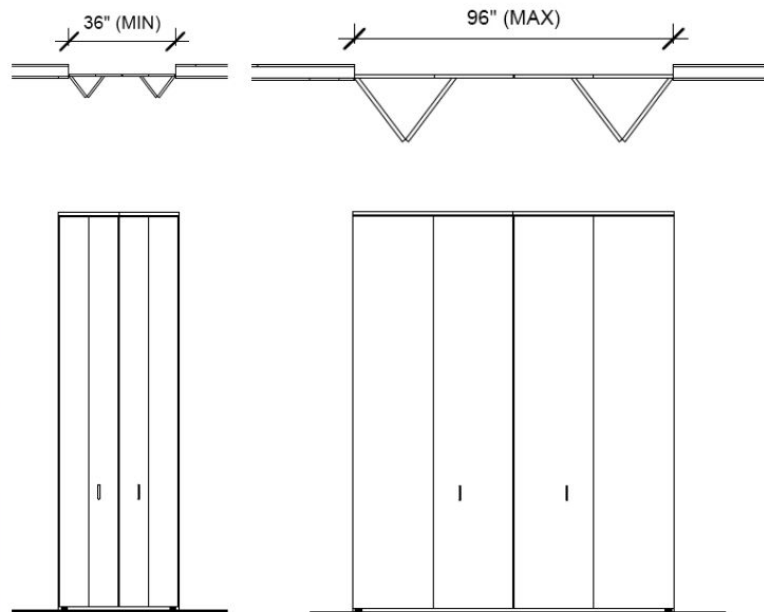
CONTINUED

FOR HIGH DENSITY HOUSING FLOOR PLANS

Magiglide bifold closet doors are all custom sized at no added costs. Many times, architects will design our 4-panel Magiglide bifold closets when they have the space to do so. The 4 panel door system goes from a 36" width to a 96" width. Again, just like every other system the customization allows for the widths to be manufactured by the 1/4".

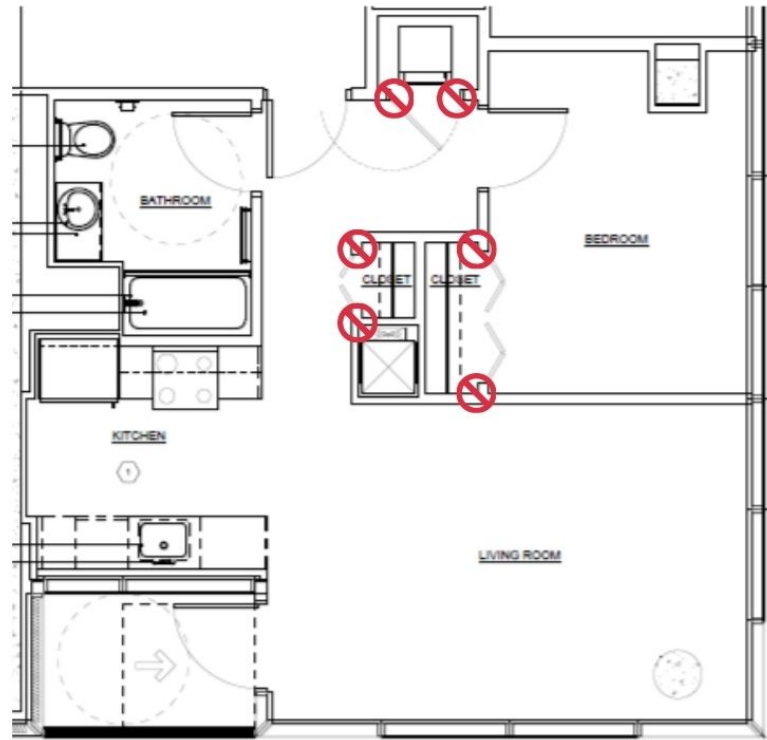
4 PANEL BIFOLD

Shown here, are different examples of the Magiglide 4-panel bifold closet doors. The main feature why those choose this 4 panel, is the full clear span of useable space in high density urban projects. Whether it be for an ADA compliance, or just smart design, our 4 panel bifold is a quick way to improve the quality of space.

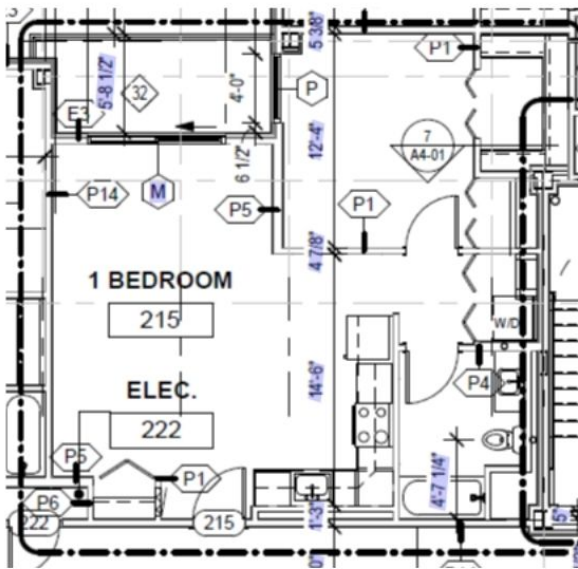


Closet Widths

4 PANEL BIFOLD



Taking a look at a duplicate floor plan, on the left and right, you can see where our estimators would suggest deleting stub walls. Often times, the only purpose of these areas surrounding closets are to make sure the closet door holds the width opening sizes so that the doors can remain a "standard size". It makes more sense, if given the option, to get rid of those place holders, so tenants can utilize their space so much more with full open access to the closet. Some architects, may choose to keep the stub walls between closets for various reasons as well. We will investigate further to make the best choice for your space you are designing. At Landquist & Son, we always give an alternate to delete stub walls as an option when bidding.



**ALTERNATE
BID**

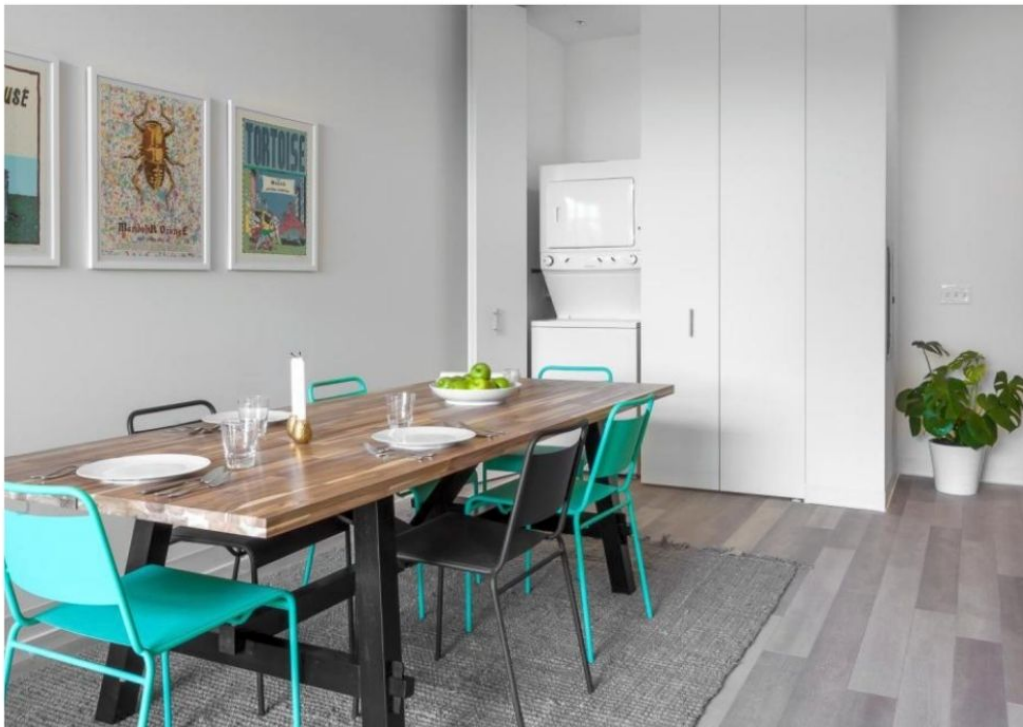
Magiglide

CLOSET HEIGHT

UP TO 10 FEET



At Magiglide, all our closet doors are also custom sized heights, at no additional cost to the customer, to the nearest 1/2". The door is the same cost to be a standard height of 6'8" or to be 8'0" tall. Therefore, another exercise we do with estimating during a project's design phase, is to delete headers as well as stub walls. This will allow for storage to continue all the way up to the ceiling. As shown below with the laundry unit, if the closet opening was a standard height, there wouldn't be room for any storage above the washer/dryer combo. Since they went up to 9 feet tall here, they have ample space to add in 2 shelves all the way across.



Keeping the Stub Walls

4 PANEL BIFOLD

When to NOT accept the **ALTERNATE BID**



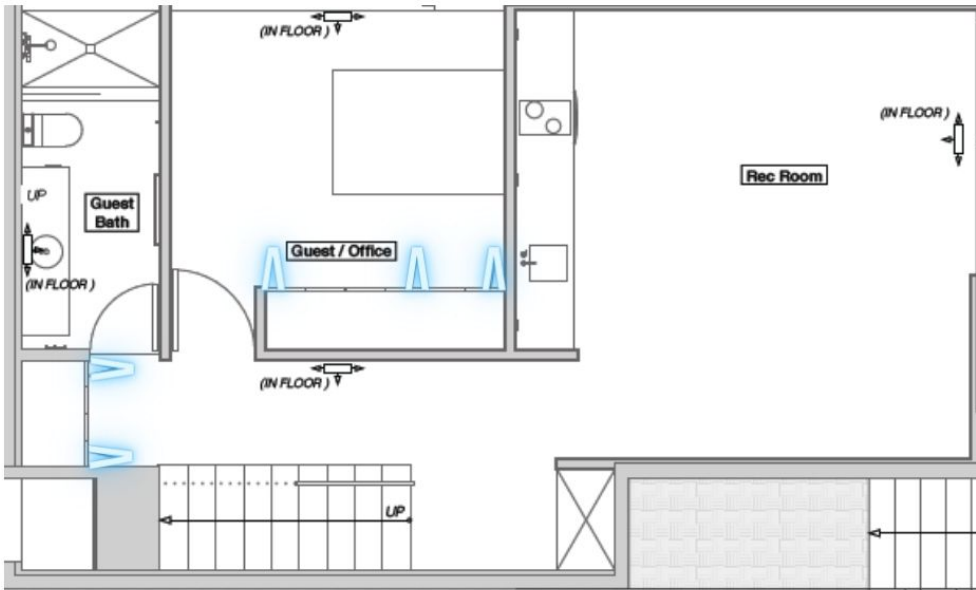
There are circumstances where the surrounding drywall surrounding the closet spaces makes sense. For example, in this space, the middle drywall between the two closets, provides a nice way to hide storage tubs for useable and accessible closet storage. It also allows for electric to be ran between these closets. Some owners always choose to have closet door heights match throughout the unit for uniformity with sightlines. The last main reason we come across for orders to remain standard opening sizes would be if the project is a rehab. There, the closet openings are already preset, so our bifolds are able to retrofit in, at no extra costs for the custom sizes.



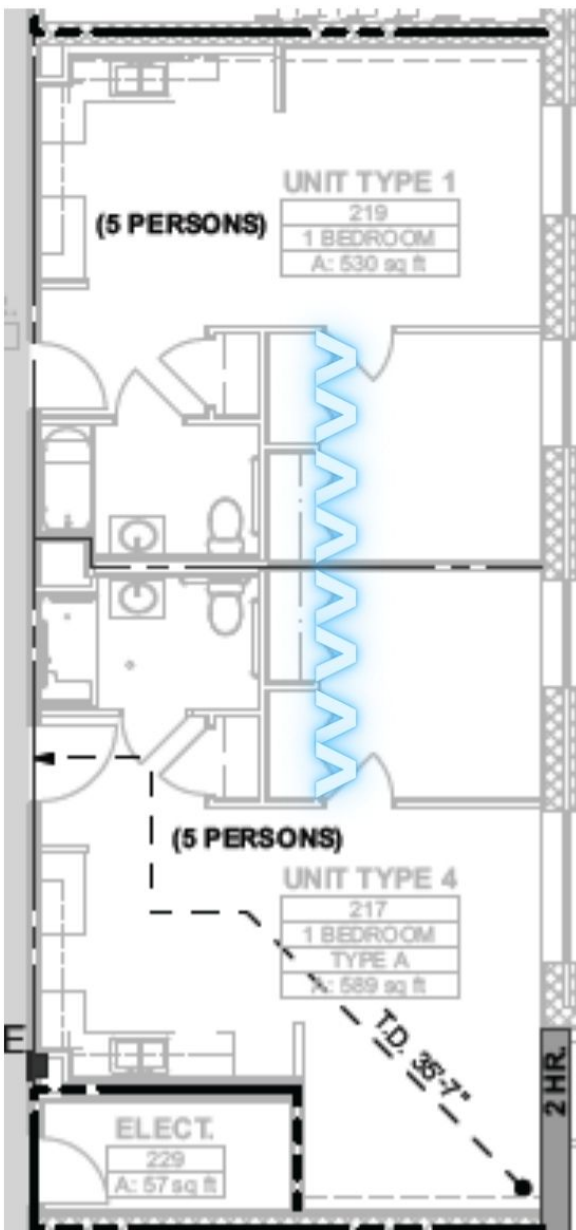
- Want a designated his and hers closet
- Need adequate space for electric to be ran
- Would like uniform closet heights to all doors in space
- Retrofitting closets to fit existing openings in a rehab project.

Smartwall Applications

REPLACING A WALL WITH USEABLE STORAGE



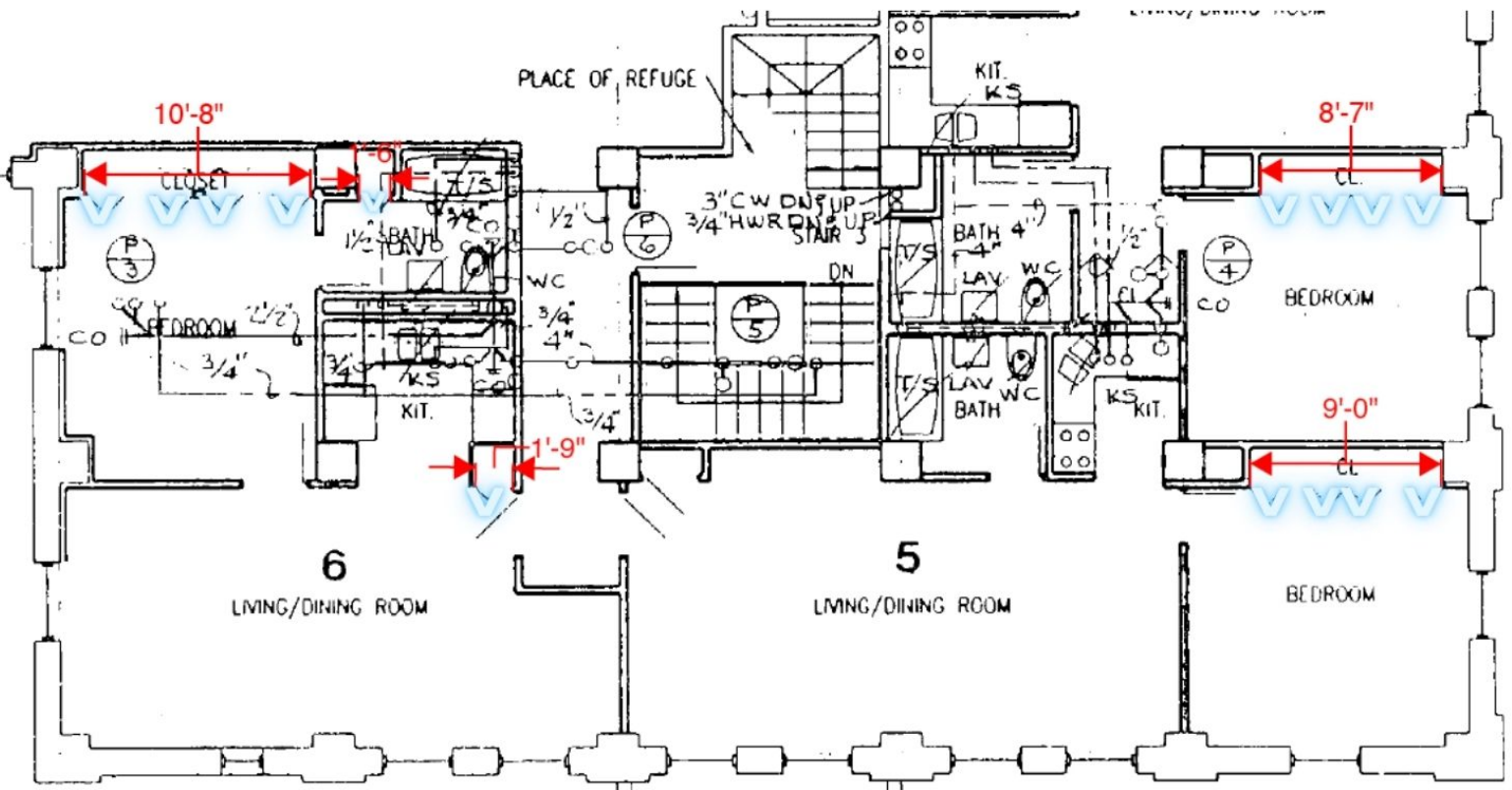
In high-density urban housing, one of the main issues with comfortable floor plans are allowing enough storage space for individuals living there. By replacing a wall with a Magiglide Smartwall, you are not only giving full access storage, but allowing the tenant to live a happier, organized, minimalistic life. Take a look at some recent job prints we have supplied our bifolds to, and how none have a "standard" size closet door.



MAGIGLIDE
PRANEEL

Smartwall Applications

CUSTOM SIZES - NOT CUSTOM PRICES



1'6" (18 inches)

1'9" (21 inches)



2 PANEL

18" - 48" width

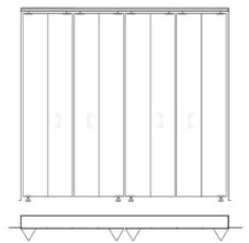
Above, take a look at a floor plan that truly tests this "no custom sizes" throughout. Again, our policy is for the same cost, you can have every single opening in the entire high rise a different size. This gives much more freedom for the architect to design with what makes sense in the space, and not to design around typical sizing width constraints for closets. It is a win-win. Taking a look at our constraints for 2 panels, we can design any size width, to the nearest 1/4" from 18"-48". Therefore, the smaller of the 2-panel shown above in the blue print, is the smallest 2 panel we can manufacture. The 8 panels, can be manufactured again, to the nearest 1/4" from

72"-191".

8'7" (103 inches)

9'0" (108 inches)

10'8" (128 inches)

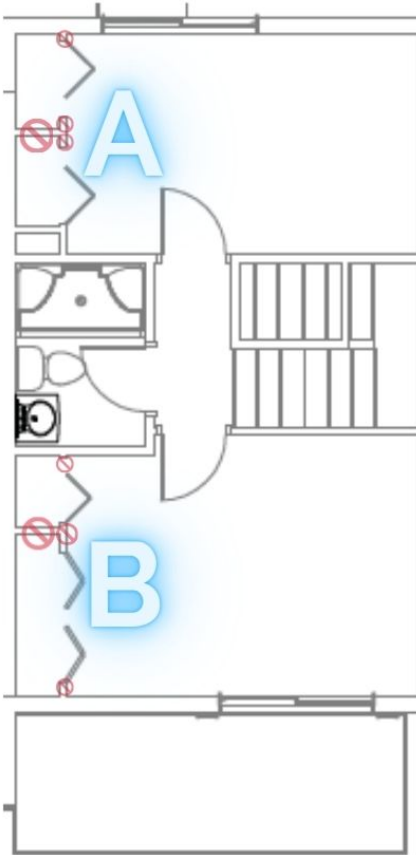


8 PANEL

72" - 191" width

Smartwall Applications

TINY BLUE PRINT ADJUSTMENT-BIG CHANGES



When receiving a take-off for a high density urban development that looks similar to this, we will always provide an alternate bid, to make big changes for the space. Take a look here, the red x's are not needed with our closet systems. The closet above near marker "A" shows a his and her's closet. The T drywall, between the two closet openings, are not necessary when designing with Magiglide. We would suggest an alternate on this blueprint, to delete those surrounding these closets, allowing for much more useable space.

When evaluating the closet opening at marker "B", a similar adjustment would be suggested. We would eliminate the T-wall separating the two closet spaces, unless of course the top 2 panel bifold needed to be a separate closet (furnace). The bottom 4 panel at "B" can have the stub walls also eliminated, since there is no need to hold your openings with our custom closets.



Urban Living 2.0 "One of 2010's Smartest Product Intros"- Architectural Record

Smartwall Examples

HIGH DENSITY HOUSING

