

**BACK FORTY**  
BUILDING CO.



# COMMON DESIGN “MISSTEPS”

WHEN DRAWING YOUR OWN PLANS



01

## DOORS

- 1) Doorways that lack privacy and aesthetics
- 2) Leaving enough room for door swing

02

## HALLWAYS + THOROUGHFARES

- 1) Hallways to “nowhere”
- 2) Correct width for halls, entries, and other high-traffic areas

03

## WINDOWS

- 1) Egress windows
- 2) Windows where posts or columns need to be

04

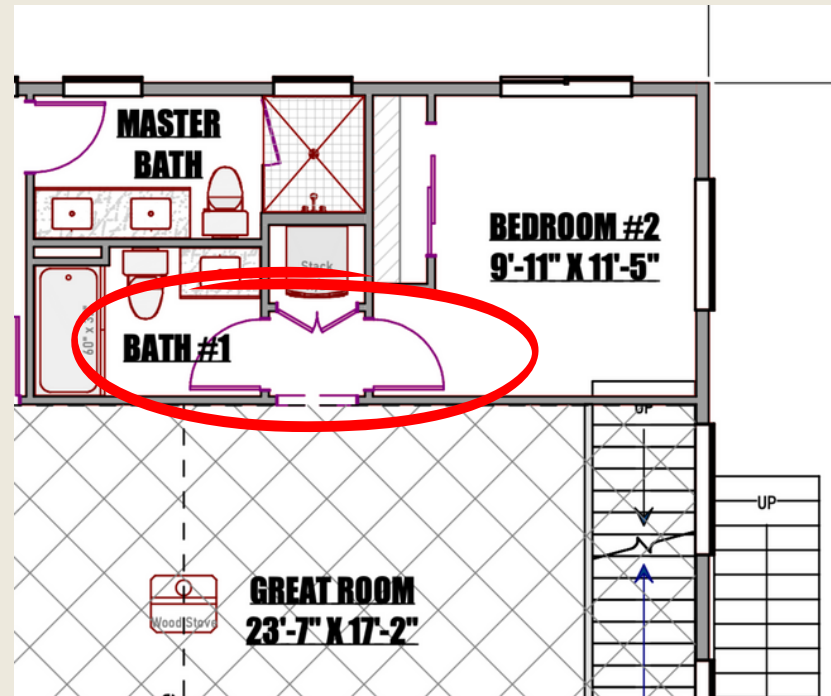
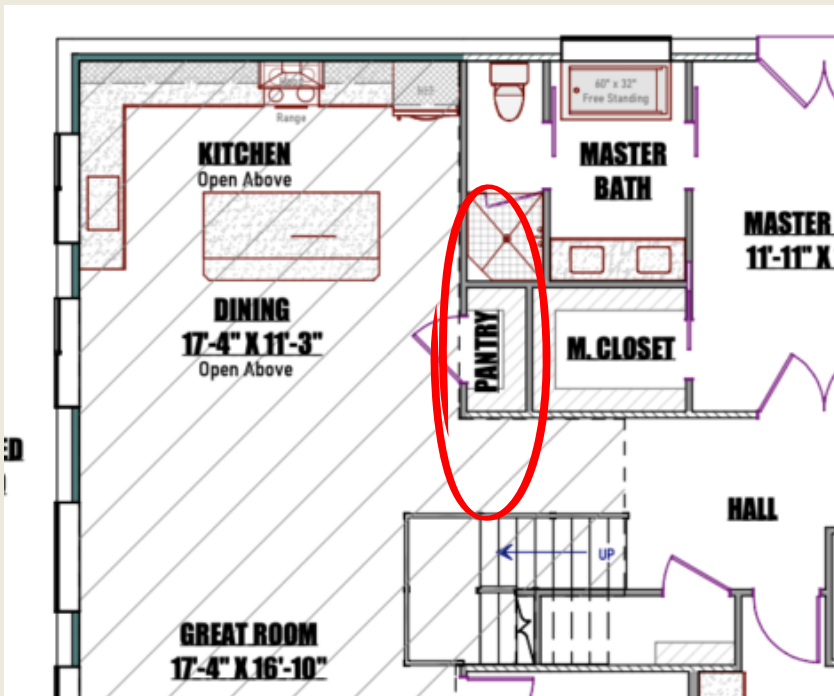
## ROOM SIZES

- 1) Wall thicknesses
- 2) Not accounting for furniture
- 3) “Dead Space”

05

## FORGOTTEN SPACES

- 1) Storage
- 2) Mechanical Room



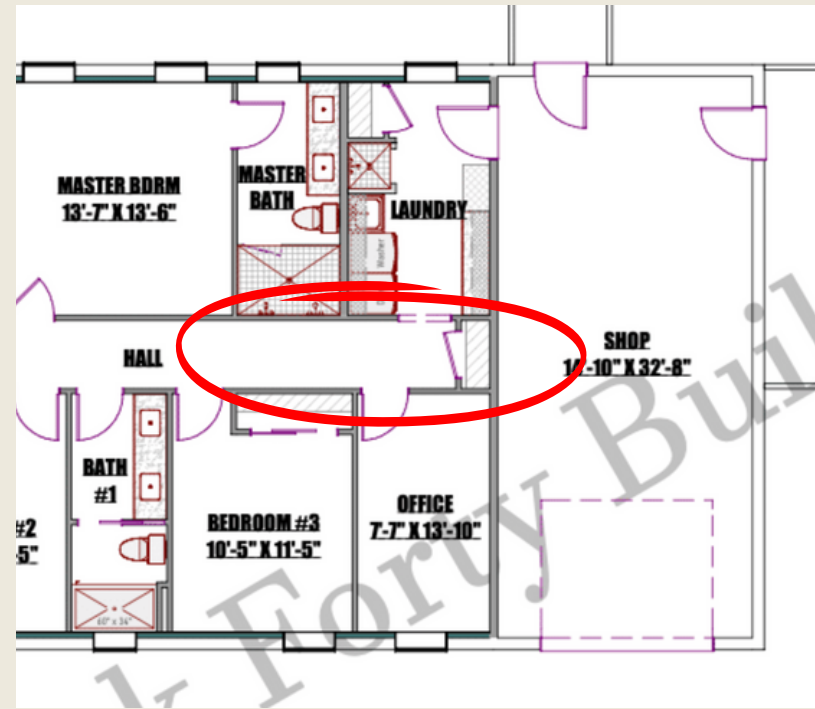
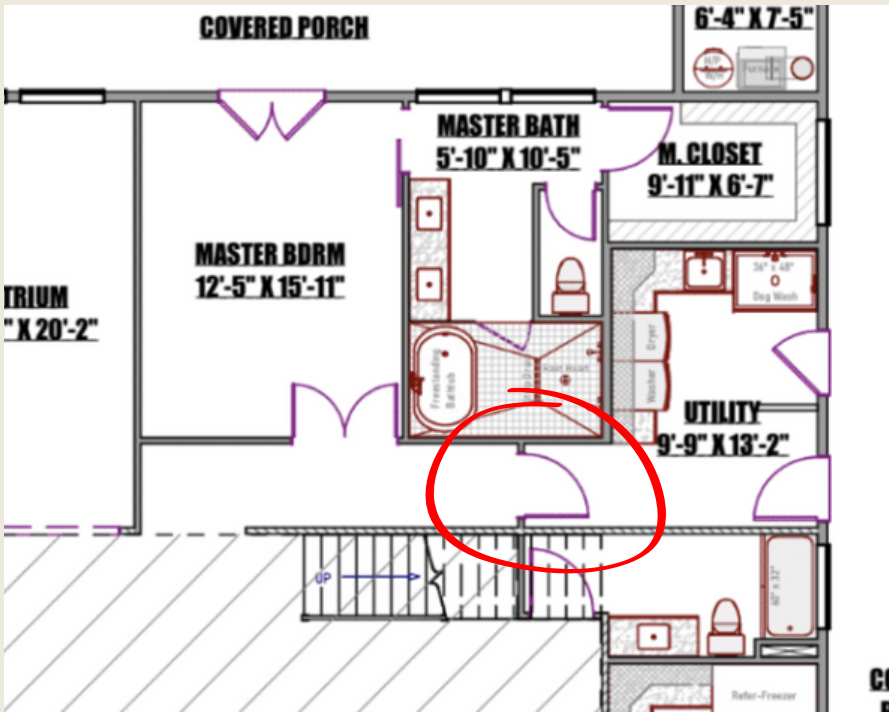
Understand if a door needs to be in-swing, outswing, single, double, and the specific door size (such as a standard 2'8" vs. sized down to a 2'6" for a pantry) in order to retain function and ease of access to a space

Rather than opening out into the great room, bedroom and bathroom doors are tucked around the corner or in vestibules



DOORS

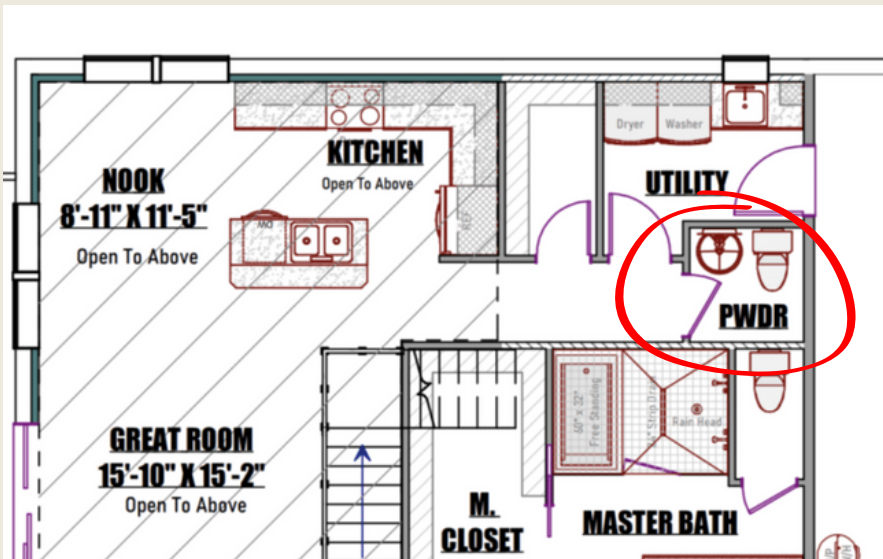




Moving a door "up" the hallway keeps your door swing tucked away from functional spaces and helps shorten long hallways

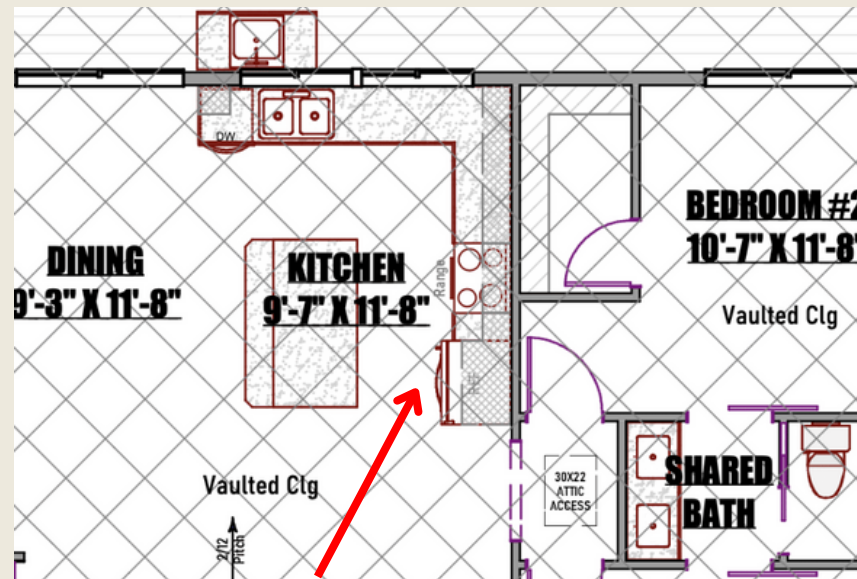
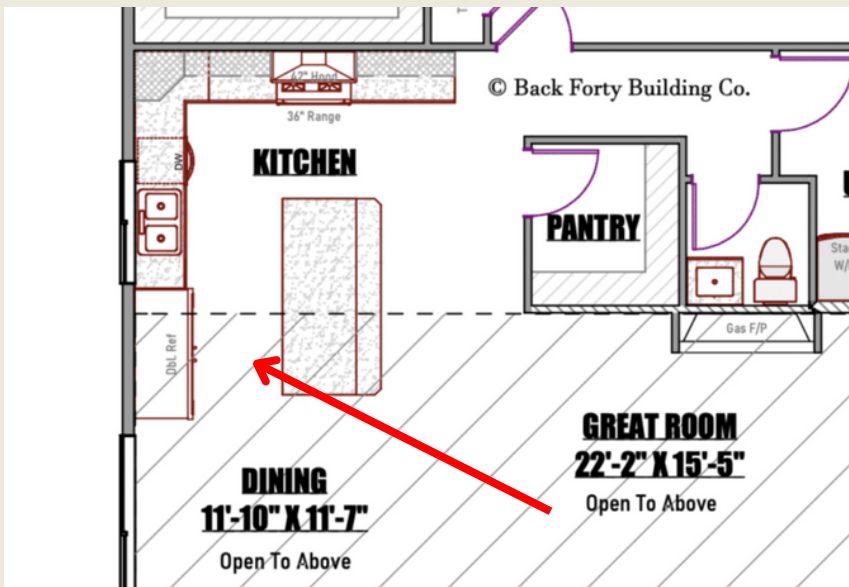
Look for small rooms, such as a powder bath or mechanical room, that you can place at the end of hallways

Placing a linen closet at the end of a long hallway can be a great way to add function and avoid a "dead end"



# HALLS





Having adequate space around an island is important! Our design standard is 3'6" minimum, however, many people go for 4'. You also may want more space on one side of your island, to make tasks like unloading the dishwasher more simple!



THROUGHFARES



Narrow hallways and vestibules can be dark and uncomfortable (not to mention making it difficult to move furniture!) Our design standards are 4' minimum for hallways and 6' for entries. You may want to make traffic areas (such as the hallway between the garage and common areas) a bit wider. If you want to accommodate for a wheelchair, wider hallways with larger turn radiuses are also recommended

Pay attention to the space between your vanity and other fixtures, doors, and walls, in your bathroom. Our design standard is typically 36" behind the vanity, though 30" can typically be comfortable if you need to size down portions of the bathroom,



THROUGHFARES

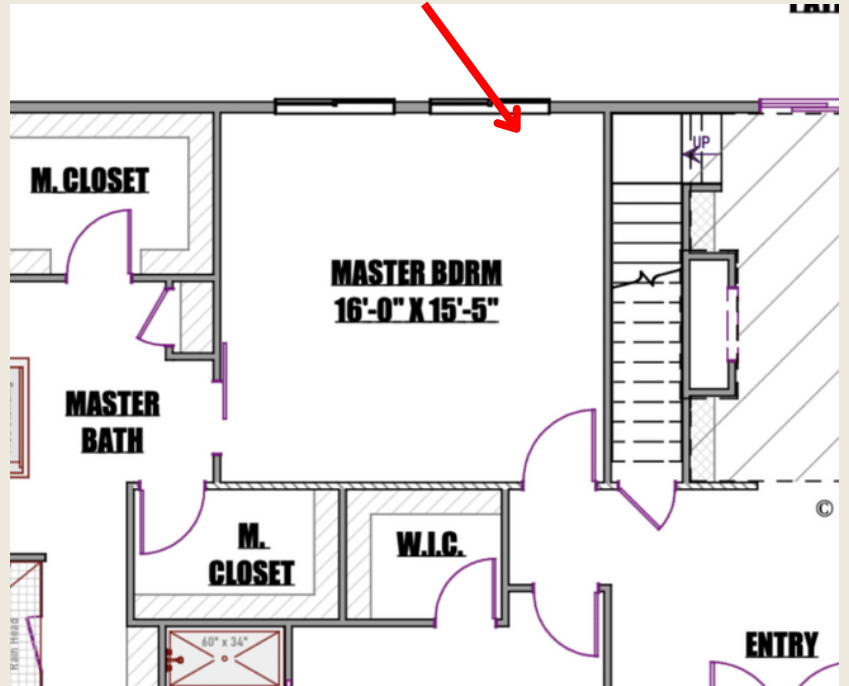




Make sure you have enough space for an egress windows in second story bedrooms (especially if you have a covered patio roof). If your bedroom doesn't sit against an exterior wall (such as in a bonus/attic truss) you will need to have a functioning dormer



Universal building code requires egress in all bedrooms. There are some variances, but a good "rule of thumb" is 3/0x5/0 for a single hung and minimum 4/0x4/0 for a slider. The sill must be a minimum of 44" off the floor



WINDOWS





If you are building a post frame or steel structure home, you will have limitations on where your windows can be placed.

We design post frame structures to have a post and truss every 8' "on center". You should try to avoid putting a window or door where a post is, as that changes the integrity of the structure, and adds cost.



The and truss column spacing for steel structures varies based on the structure type, but is typically every 12-16' for an open web truss or hybrid building, and every 20-30' for a red iron I-beam building. As with post frame, you can't put a window or door where a column needs to go.

One final thing to remember is that having lots of large windows or a "wall of windows" can impact the strength of your building, make it more costly to build (especially if windows must be tempered), and require additional engineering.

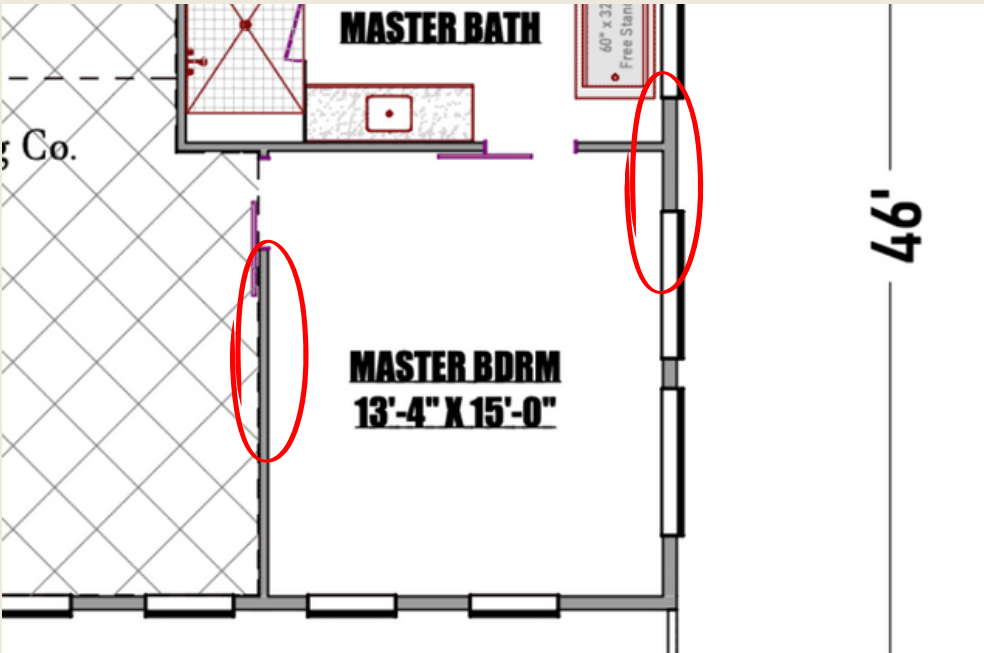
WINDOWS





Our design standard for Master/Primary bedrooms is 15' x 15', however, you might elect to size down or reallocate space from the bedroom to common areas, like the kitchen or living room. Guest/kids bedrooms typically are 11' x 11' minimum (and, never under 10' any direction)

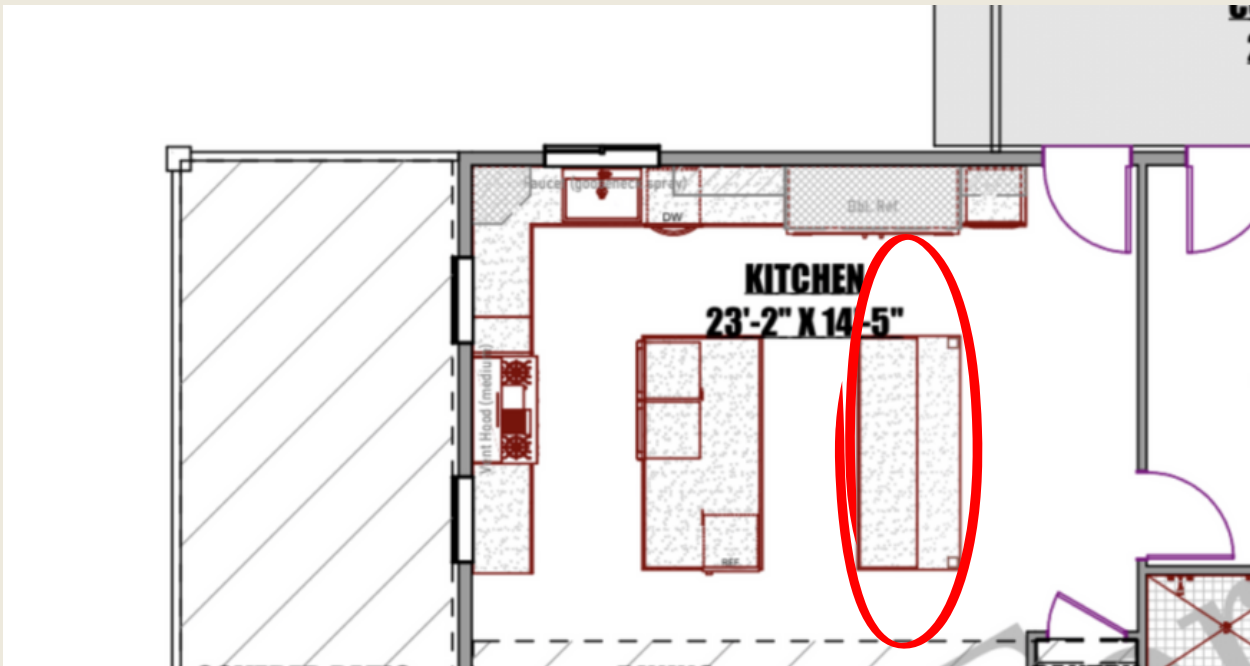
When placing windows in a bedroom, don't forget to consider where your bed will go. Everyone loves natural light, but if you put too many windows in a bedroom, you'll run out of wall space for a bed. Transom or clerestory windows above the bed can be a good choice, or, a window on either side of the bed (just be sure to space them far enough apart to fit your bed in between)



While it's not common to draw wall thicknesses "to scale" on hand-drawn plans, it IS something to understand. An interior wall is typically a 4" thick (unless it's bearing) and exteriors are usually 6". If you use a steel structure, your perimeter walls will typically be 8"-12". It's important to understand this because if you size your rooms on the small side to begin with, you'll REALLY run out of space when you get your plans drawn to scale. Always factor that you need a few extra inches in each room, to account for wall thicknesses.



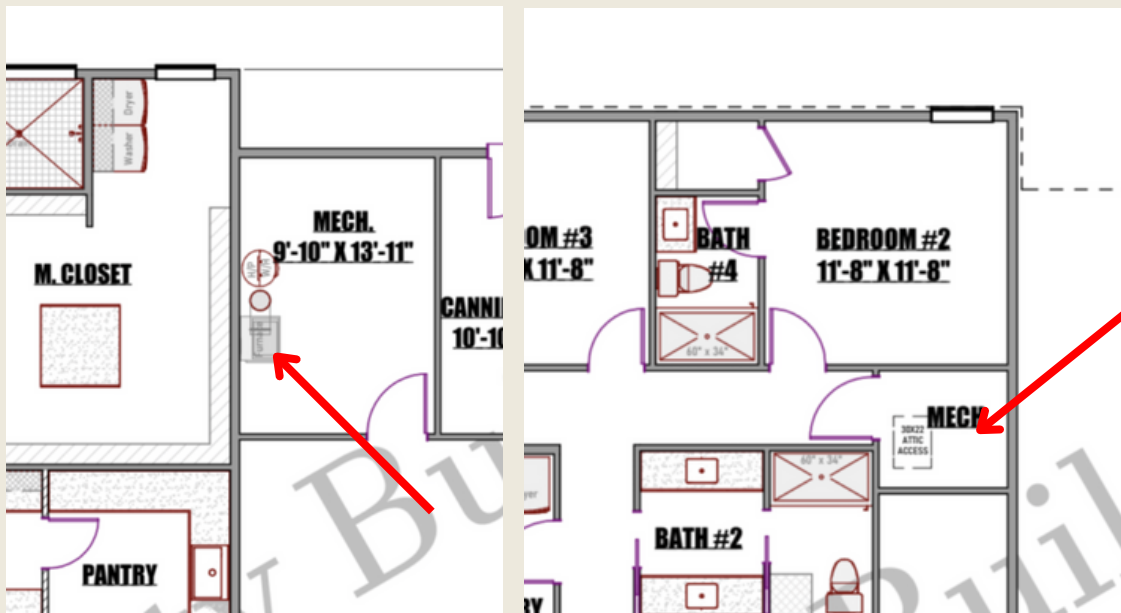
One of the best ways to avoid “dead space” is to visualize how you’ll live in your home. What areas do you use the most? What type of furniture do you need to account for in the floor space? What areas do you find feel too big or too small in your current home?



Usually, the most “wasted” space we see are in oversized master bedrooms, and open concept living areas. For example, you might have 15' from the edge of your island to the closest wall. That would likely be too tight for a dining room, but it’s a lot of square footage! In this scenario, we added a second island and extended the countertop...there is still plenty of space to walk behind the island or out the kitchen door, and we were able to “reclaim” almost 100 sq ft of floor space that now served a purpose.

# ROOM SIZES





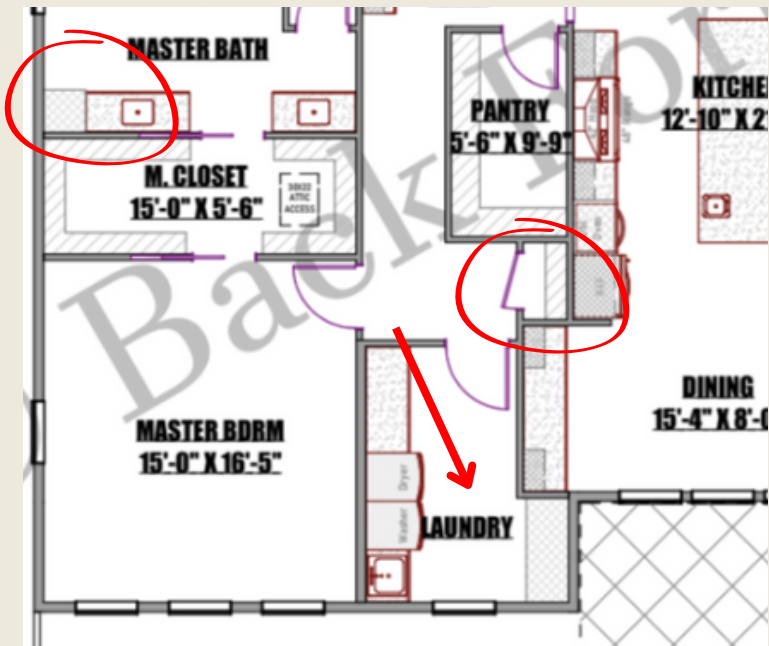
People often forget the mechanical room!

Ideally, your mechanical room is centrally located in your home. You might even consider TWO mechanical rooms, if you have a large home, two levels, or a great deal of vaulted space that is difficult to run duct work through

Typically, we size mechanical rooms at a minimum of 5'x5' ...however, if you have features such as radiant in floor heat, you'll want to size up to 9' x 9'+. You also should consider how easy it is to access and have space to work in your mechanical room!

It is acceptable to have mechanicals in the garage, but be sure to check with your local building code if they need to be enclosed in a room (this is also advisable in very cold climates)

Another forgotten amenity is storage space such as cabinets, linen closets, ample pantry space, and hanging space. You can often find storage space in hallways, by shrinking vanities, or by switching the way a door swings.



FORGOTTEN SPACE



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## READY TO TAKE YOUR PLANS TO THE “NEXT LEVEL”?

We love working with clients to take their hand-drawn or “semi pro” plans  
and turn them into formal construction documents

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to get in touch with us and receive more information on  
working with Back Forty to bring your home to life!