

Occupational and Physical Therapists Guide to Home Modifications



COLORADO
Department of Local Affairs

Division of Housing



PERSON CENTERED APPROACH

Each person should be given the opportunity to take part in the decision making process

Home mod solutions will be individual because each person with a disability is an individual

People facing a similar obstacle may require a different solution due to their specific needs

BUT.....

This doesn't mean that all requests for a home modification will be approved.



COLORADO
Department of Local Affairs

Division of Housing

The OT/PT evaluation still must justify the need for the home mod in order for the person to remain in their home.

The home modification being proposed must be for the benefit of the client.

**Currently, the lifetime cap for home mods is \$14,000.
(prioritize list of home mods)**

Duplication of services is not currently allowed.



COLORADO
Department of Local Affairs

Division of Housing

Getting a signature on the OT/PT evaluation

The goal of obtaining the client's signature is to ensure that the client is being informed about what modifications will be done to their home with the understanding the proposed home mods can change.

The OT/PT is not required to make multiple trips to the client's home in order to obtain the signature.



COLORADO
Department of Local Affairs

Division of Housing



Tips and Tools for Completing a Home Modification Assessment



COLORADO
Department of Local Affairs

Division of Housing

The more information and detail you can provide on the OT/PT evaluation, the better!!



THANK YOU!!!



COLORADO
Department of Local Affairs

Division of Housing

Common Home Modification Terms

Ramp Landing

Ramp Run

1:12 Ratio

Threshold Ramp

Portable Ramp

Roll In Shower

Walk In/Step In Shower

Hand Held Shower Hose with Diverter

Glide Rail/Remote Holder

VPL-vertical platform lift

Stair Glide

Swing Clear Hinges

Cased Opening

Barn Door

Transition Strip

Wall Hung Sink

Pedestal Sink

Vanity/Base Cabinet

Off Set Drain

Walk In Tub

Tub Cut



COLORADO

Department of Local Affairs

Division of Housing

RAMPS

Important factors to consider when constructing or installing a ramp

Which entrance will provide the best access?

Is there enough room? Since most ramps are constructed to a 1:12 ratio (one foot of ramp for every one inch of height), is there enough room for the proper size ramp, including landing(s). Is a platform lift more appropriate?

Are there any obstacles that can be easily removed or relocated? Landscaping, flower pots, bird bath, gutters/downspouts etc.

Are there any obstacles that are difficult to remove/relocate or that cannot be removed/relocated? Trees, basement window wells, access to septic tank, exterior water faucet, sprinkler heads, electrical panel, etc.

Does the site have a steep slope? Does the area of egress slope away from the home?



COLORADO
Department of Local Affairs

Division of Housing

RAMPS

Important factors to consider when constructing or installing a ramp

Will there be access from the egress point, like a driveway, to the bottom of the ramp. Where will the ramp end?

What material is being used? Concrete and metal ramps are typically more expensive than a wood ramp but require less maintenance. Wood ramps are more aesthetically pleasing and look less “institutional” than a concrete or metal ramp. Metal ramps can be removed and re-used in another location.

Consider slip resistance surfaces on the ramp runs. Concrete ramps can be finished with a texture. Metal ramps can have a grated surface. Wood ramps will need to be treated with a slip-resistant surface.

Installing a cover over the ramp will NOT keep snow and water from accumulating on the surface of the ramp. Snow removal will still be necessary.

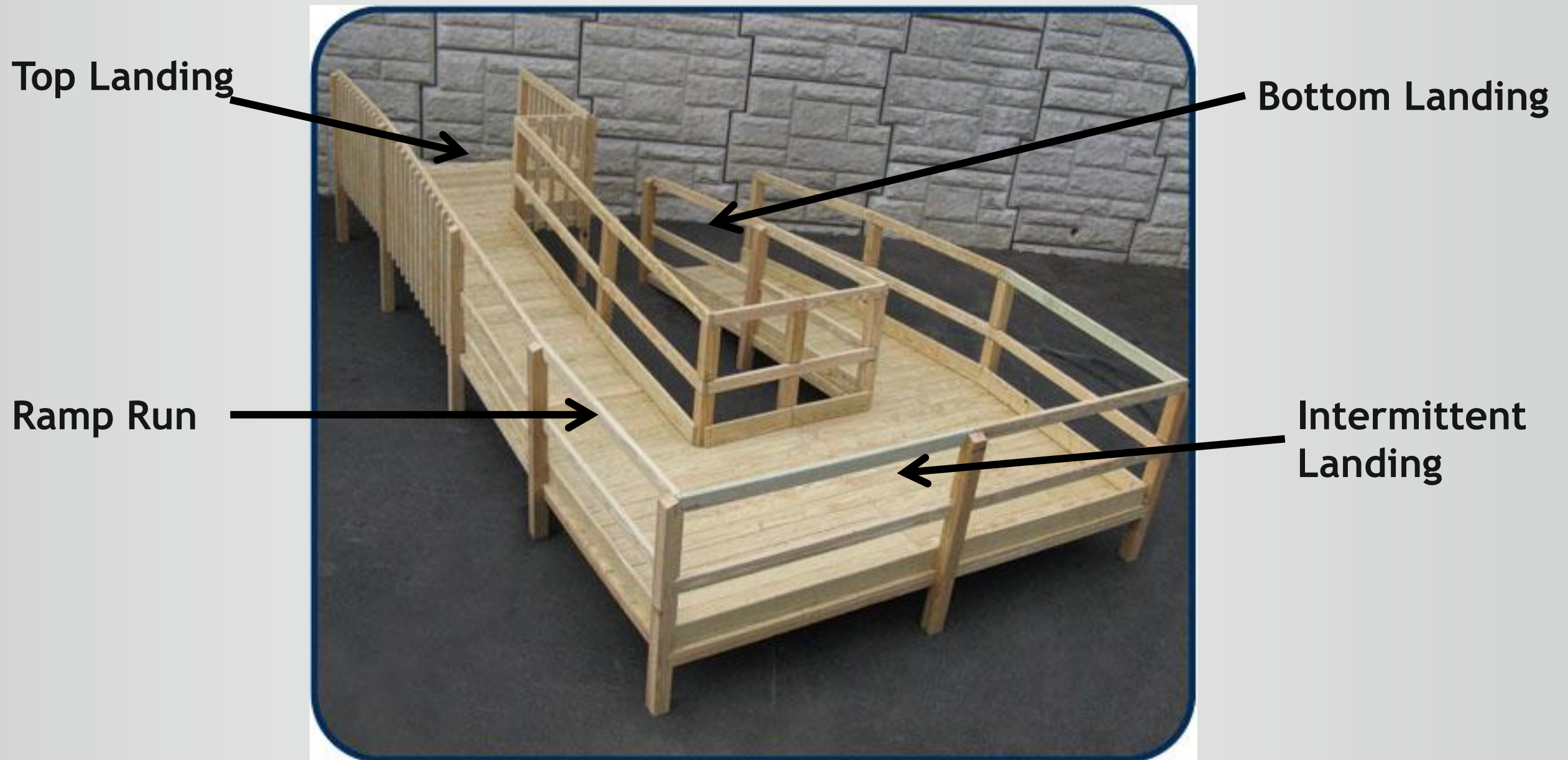
Be sure the ramp doesn't become an obstacle.



COLORADO
Department of Local Affairs

Division of Housing

All ramps with a straight ramp run must have a top and bottom landing.
All ramps that change direction, must have intermittent landing(s).



COLORADO
Department of Local Affairs

Division of Housing



Steps are typically 7” tall and the exterior door thresholds are typically 4”. This ramp would need to be approx. 53 feet.

What about installing a platform lift?



COLORADO
Department of Local Affairs

Division of Housing

Consider the design of the ramp.

What about the threshold?

Minimum clear width of a ramp should be 36”
but can be wider if needed by the client

Is this the driveway?



COLORADO
Department of Local Affairs

Division of Housing



Where is the
final egress
point
located in
relation to
the
entrance?

Two sets of steps



COLORADO
Department of Local Affairs

Division of Housing



**Consider the slope
of the existing site.**



COLORADO
Department of Local Affairs

Division of Housing

THRESHOLD and PORTABLE RAMPS



Used on
thresholds
up to 3
inches



Portable ramps are
typically not ideal
for every day use



COLORADO
Department of Local Affairs

Division of Housing

STAIR GLIDES and VERTICAL PLATFORM LIFTS

Important factors to remember when considering a stair glide or VPL

How wide is the stair well?

What type of seat is needed? Heavy duty? Swivel? Seat Belt? Arm rests?

Is there electrical service for either the stair glide or VPL?

Is there an accessible route to the VPL?



COLORADO
Department of Local Affairs

Division of Housing

EASY STEPS



In situations where an individual either does not need or want a ramp, but still has difficulty using stairs, Easy Steps could be an option.

These steps have a deeper tread and the rise is lower than standard stairs.

The deeper tread can accommodate a mobility device, such as a walker.

The lower rise is good for people who are not able to lift their legs/feet very high.



COLORADO
Department of Local Affairs

Division of Housing

ACCESSIBLE SHOWERS

Important factors to consider when installing showers for access

Is a roll-in shower or walk-in/step-in shower needed?

Is the existing space large enough for the new shower? Consider the size of the person, their shower chair or bench.

Does a built-in or wall mounted seat need to support additional weight?

Consider the type and location of the shower faucet. Can someone in a seated position reach the faucet controls if necessary?

Is a hand held shower hose needed? If so , how long? Does it need a diverter? Guide rail?

Consider the type and location of grab bars.

What about a shower curtain rod? Shower doors? Other accessories such as storage shelves or soap dish?



COLORADO
Department of Local Affairs

Division of Housing

ACCESSIBLE SHOWERS

Important factors to consider when installing showers for access

What type of materials will be used on shower walls? Tile, fiberglass, cultured marble?

Tile - looks nice but grout lines can get dirty/moldy and requires cleaning, lasts a long time, more costly to install, looks nice

FRP/Fiberglass - less expensive and durable than acrylic, stains more easily, less expensive than other options

Acrylic- more durable than FRP, some abrasive cleaners can damage the surface, can last a life time, not easily repaired

Cultured Marble - manmade, durable, looks very nice, easily damaged by abrasive cleaners, more expensive



COLORADO
Department of Local Affairs

Division of Housing

ROLL-IN SHOWER PANS/BASES

Water will end up on the bathroom floor...

Unless someone is drying off completely in the shower,

If someone pushes out the shower curtain,

If the shower hose is misguided.



COLORADO
Department of Local Affairs

Division of Housing

STEP-IN/WALK-IN SHOWER PANS/BASES



COLORADO
Department of Local Affairs

Division of Housing

Consider the location of a built in seat or bench in relation to the shower faucet controls.



COLORADO
Department of Local Affairs

Division of Housing

From a seated position, can someone easily reach the shower controls?



COLORADO
Department of Local Affairs

Division of Housing



Hand Held Shower Hose with Diverter and Grab Rail/Glide Rail

Allows for more control over water spray

Allows water to come to temperature before showering

Is the glide rail strong enough to use as a grab bar?

Single Lever Shower Faucet

Easier for most people to use



COLORADO
Department of Local Affairs

Division of Housing

WALK-IN TUBS

Important factors to consider when installing a walk in tub

The home evaluation must justify the need for a walk-in tub vs. a shower. If jets are needed, then this needs to be justified separately.

Can the tub fit thru the bathroom door? Can the tub fit down the hallway?

Will the person fit in the tub? Will the person fit through the tub door? Can the person step into the tub?

While sitting in the tub as the tub either fills with water or drains, how will the person stay warm? Is this an issue?

Walk in tubs use a large amount of water. This can affect a person's water bill and the amount of water that is heated by the existing water heater. The Home Mod benefit generally cannot purchase a new water heater.



COLORADO
Department of Local Affairs

Division of Housing

Other considerations when requesting a walk in tub



Location of grab bars?

Type and location of faucet? Is a hand held hose needed?

What is minimum width of the door that is needed?

Which way does the door need to swing? In or out?

What is the maximum height of the door threshold that the person can step over?

Consider that the person will have to wait for the tub to fill/drain while sitting in the tub



COLORADO
Department of Local Affairs

Division of Housing

And more considerations when requesting a walk in tub

If the person uses a wheelchair, will they be able to transfer into the tub?

Will they be able to close the door unassisted?



P.S. Don't forget about grab bars, type/location of faucet, is a hand held hose needed?



COLORADO
Department of Local Affairs

Division of Housing

TUB CUTS

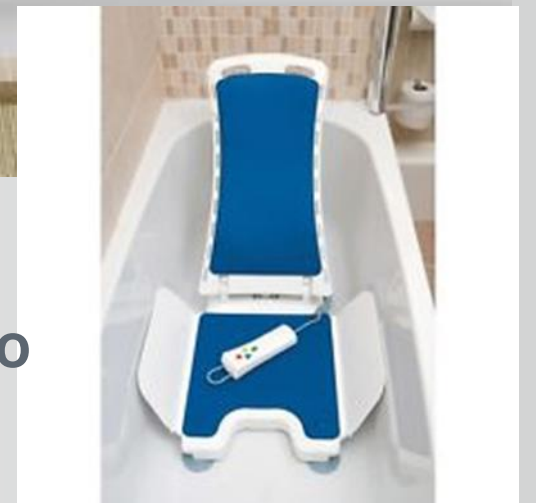
If neither an accessible shower or walk in tub are possible, consider using a tub cut.

Don't forget about the 'step in' factor.

Don't forget about grab bars, type of faucet, use of shower chair or bench, shower hose.



Hydraulic bath seat can lower the person down into the tub



COLORADO
Department of Local Affairs

Division of Housing

TOILETS

Comfort Height/Chair Height



Toilet Risers add approx. 3 1/2 inches



COLORADO
Department of Local Affairs

Division of Housing

ACCESSIBLE SINKS/VANITIES/COUNTERS

Important factors to consider when someone needs an accessible sink

What type of faucets are needed?

How far does someone have to reach in order to use the faucets?

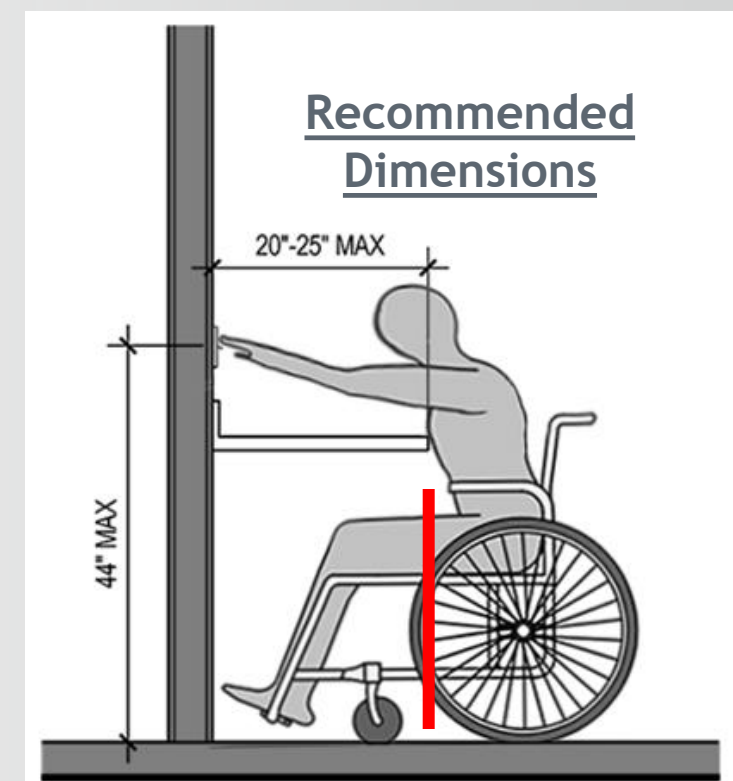
How much wheelchair space is needed under the sink/counter?

What is the height of the sink/counter?

Don't forget about pipe protection.

What about storage?

What about access to an outlet or light switch?



COLORADO
Department of Local Affairs

Division of Housing

PEDESTAL SINK



Pedestal sinks come in various sizes (height, depth and width).

If space and dimensions are critical, a pedestal sink may not be the best choice.

← Consider how the pedestal could possibly become an obstacle for a wheelchair



COLORADO
Department of Local Affairs

Division of Housing

Wall Mounter Counter with Sink and Single Lever Faucet

Can be installed at the proper
height that is needed

Provides more counter space
than a Pedestal or wall hung sink



COLORADO
Department of Local Affairs

Division of Housing

WALL HUNG SINK with a Single Lever Faucet



Don't forget about storage.
What type of drawer/door
pulls are needed?

Pipe protection



COLORADO
Department of Local Affairs

Division of Housing



No base cabinet/vanity and counter/sink has been lowered



No base cabinet/vanity



COLORADO
Department of Local Affairs

Division of Housing

Create more space in a small bathroom or ½ bath by using a corner wall mounted sink



Create more space under the sink by using an off-set drain



COLORADO
Department of Local Affairs

Division of Housing

SINGLE AND DUAL LEVER FAUCETS



Consider type and location of faucets



COLORADO
Department of Local Affairs

Division of Housing

DOORS

Important factors to consider when widening or installing a door for access

Can a door be widened enough to provide access? What is the outside width of mobility device? Is clearance for hands/fingers needed?

Will light switches, outlets, vents or other fixtures have to be relocated in order to widen the door?

Can “swing clear hinges” be installed instead?

Installing a new door in an existing wall can be more costly than widening an existing door.



COLORADO
Department of Local Affairs

Division of Housing

DOORS

Important factors to consider when widening or installing a door for access

What type of door will be installed? Swing type, pocket door, barn door, bi-fold doors, sliding doors?

Is a single lever door handle needed? Does it need to lock?

Is an auto door opener needed?

Is a door even necessary?



COLORADO
Department of Local Affairs

Division of Housing

What if a door can't be widened but access is still needed?



© Beth Bryan at Unskinny Boppy

Can a new door be installed in an adjacent room/wall?

Will swing clear hinges provide enough room?

Is a cased opening possible?



COLORADO
Department of Local Affairs

Division of Housing

Don't Forget!

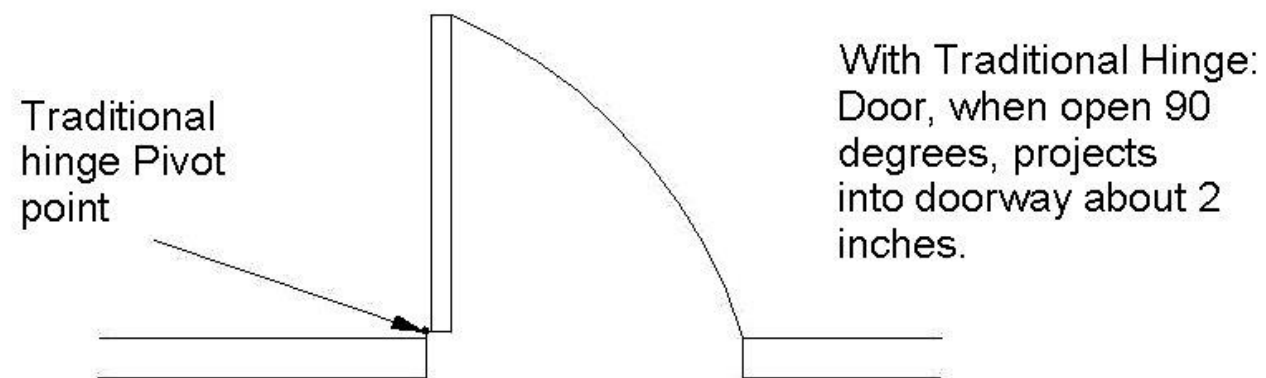


Can someone clear the swing of the door in order to close it behind them?

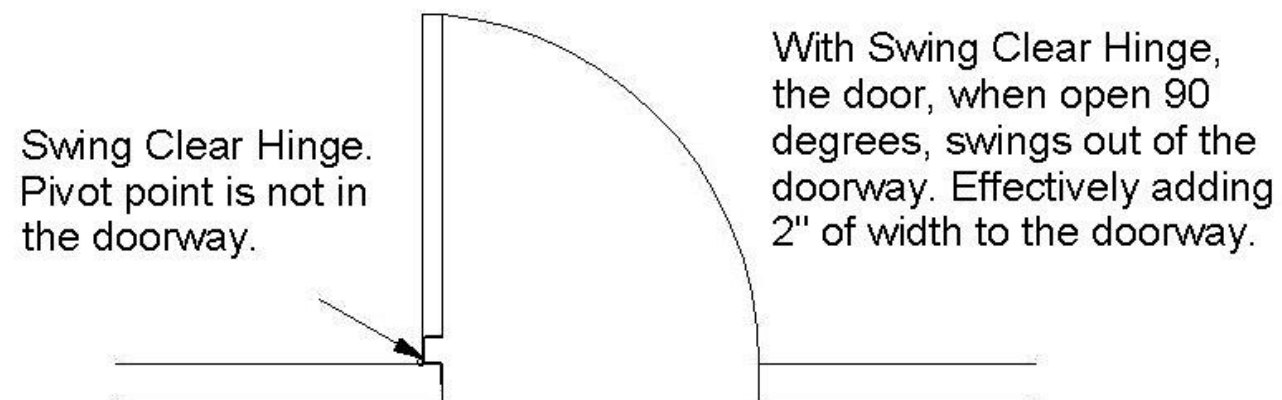
Will the swing of the door clear the fixtures in a room?

Does the swing of a door need to be reversed?

Doorway with Regular Hinge



Doorway with Swing Clear Hinge



COLORADO
Department of Local Affairs

Division of Housing

CASED OPENING

Is a door necessary?

For example, if passing thru a bedroom is necessary in order to gain access to a bathroom that is being modified, a cased opening could be installed.



COLORADO
Department of Local Affairs

Division of Housing

Will widening a door affect existing fixtures?

Light switch, outlets, temperature controls



Consider location of
vanity/sink , toilet,
linen closet, medicine
cabinet or other
fixture



COLORADO
Department of Local Affairs

Division of Housing

Is there a smooth transition between floor surfaces after a door has been widened?



Too high for a wheelchair



COLORADO
Department of Local Affairs

Division of Housing

Is there enough room to install a pocket or barn door?

Don't forget about light switches, outlets, temperature controls, alarms, medicine cabinets, etc.

Is the client better served with a pocket or barn door?



POCKET and BARN DOORS



COLORADO
Department of Local Affairs

Division of Housing

The typical hardware for a pocket door may be difficult for some people to use. Consider other more “user friendly” hardware.



Don't forget to account for the space used by the door handle!



POCKET and BARN DOORS

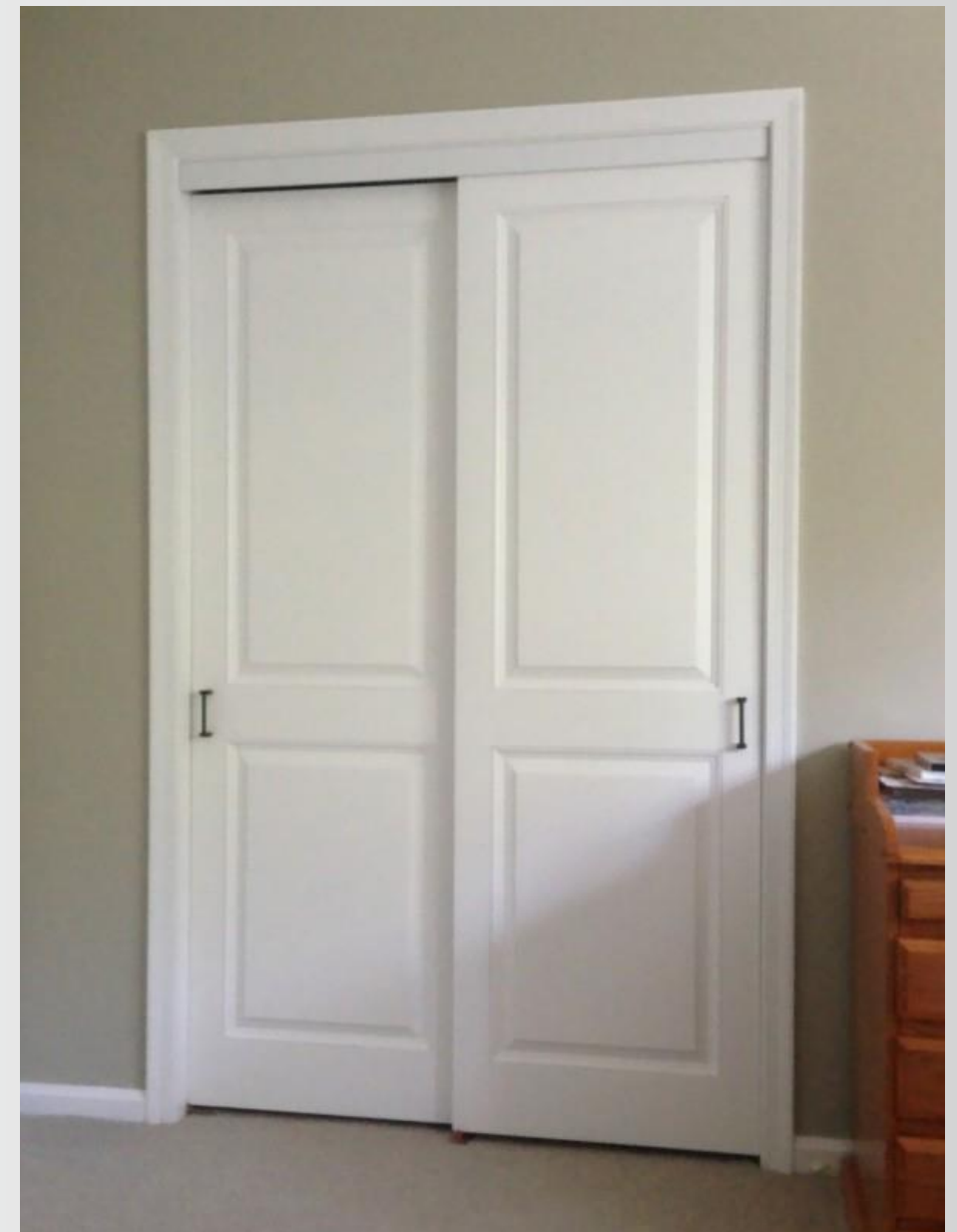


COLORADO
Department of Local Affairs

Division of Housing

Consider the space occupied by an opened bi-fold or sliding door

Don't forget about the door pulls!



Bi-Fold and Sliding Doors



COLORADO
Department of Local Affairs

Division of Housing

DME

Durable Medical Equipment



Toilet Frames



Hydraulic Bath Seat



Grab Bars-unless part of a large home mod project



Portable Shower Chairs or Benches



Tub Bars



COLORADO
Department of Local Affairs

Division of Housing

The more information and detail you can provide on the OT/PT evaluation, the better!!



THANK YOU!!!



COLORADO
Department of Local Affairs

Division of Housing

Naomi S. Hubert, M.Ed.

Department of Local Affairs/Division of Housing
Housing Rehabilitation and Accessibility Specialist

1313 Sherman, Rm 320

Denver, CO 80203

303-864-7825

naomi.hubert@state.co.us



COLORADO
Department of Local Affairs

Division of Housing