

Herriman City Residential

Detached Accessory Dwelling Units

(DADU) Plan Check

2021 IRC

Conversion of Existing Detached Structures to DADU

1. Existing detached structures must have been built with a building permit and passed all required inspections in order to be considered for a conversion.

Footings and Foundations

2. Shall comply with Chapter 4 of the IRC. Frost depth for Herriman is 30 inches. Minimum depth of footing must be 12 inches below undisturbed soil. Exceptions to frost protection:
 - a. 600 square feet of light framing with eave height of 10 feet or less.
 - b. 400 square feet other than light framing with eave height of 10 feet or less.
3. Frost protection is needed for shallow foundations per R403.3.
4. A minimum 6-mil vapor retarder with joints lapped not less than 6 inches is required under concrete floors.

Exterior

5. Meet wind, snow & seismic design criteria (see [Tool](#)).
6. Provide an ice barrier at roof.
7. Exterior wall coverings shall comply with manufacturer's installation requirements.
8. Fire resistant construction on exterior walls may be required (see Table R302.1(1) at end of this document).
9. A minimum 36"x 36" landing is required at exterior doors with a light outside the doors.
10. Provide an additional address for the DADU on the house, visible from the street with numbers 4" in height and stroke width of 1/2". Numbers must be a color contrasting with the background.

Minimum room sizes and spaces

11. Plans need to be fully dimensioned. Habitable rooms req. min. 70 s.f. with a min. 7' dimension (exception: kitchens).
12. Ceiling height to be 7' minimum.
13. 21" clear space in front of toilet and 15" to each side of center.
14. 900 square inch shower floor area and min. 30" dimension one side. Min. 22" door with a min. 24" clearance in front of door. Water resistant gypsum board is not required if non-absorbent shower surround is in place.
15. Tempered glass is required for glass in a shower door or if a window is located within 60" of a standing or walking surface, or measured 60" horizontally of water's edge.
16. 36" finished width for hallways.
17. NOTE! Any lesser dimensions must be approved at the time application is made.

Stairway Minimums

18. 36" finished width.

19. 6'-8" head clearance (measured upwards from tread nosing).
20. 8" maximum riser height; 4" minimum.
21. 9" minimum tread extension measured tread nosing to next tread nosing.
22. 34" to 38" height for handrails (required with 4 or more risers). Handrails must return to a wall or post.
23. 36" high guardrails with 4" spacing between intermediate rails (required beside landings and elevated floors of more than 30").

Construction Materials

24. Sole plate (wood on concrete) must be redwood or treated.
25. Beams must be sized for weight carried.
26. Max. stud spacing 24" on center non-bearing.
27. Enclosed space under stairs accessed by a door or access panel shall have walls, under-stair surface and any soffits protected with 1/2" gypsum board.
28. If metal studs are used, continuous insulation such as foam board is required behind the metal studs.
29. All exterior walls are to be fireblocked (draftstopped) horizontally and vertically in 10' compartments, and all vertical-to-horizontal concealed spaces (see [Fireblocking Requirements](#)).
30. Egress door must be side hinged and open 90 degrees with clear width of not less than 32" and clear height of 78".

Insulation

Utah State Amendments for IRC Chapter 11

Above-grade exterior walls	R-21
Ceilings / roof assemblies	R-38
Floors over unconditioned space	R-30
Basement walls (conditioned basements)	R-10 continuous or R-13 cavity
Windows and glazed doors	Maximum U-factor = 0.32
Skylights	Maximum U-factor = 1.3
Opaque doors	Minimum U-factor = 0.6

31. Fill all top plate penetrations for electrical and plumbing with foam or fiberglass insulation.

Window Minimums

32. Natural light and ventilation are required, however, exceptions for artificial lighting and full mechanical systems are allowed.
33. Show sizes of windows. Windows must be at least 8% of room area for natural light and ventilation.
34. Each bedroom must have one window for emergency egress. Min. 5.7 s.f. actual opening – min. 20" wide OR 24" tall. (Bedroom door to outside is an alternate escape.)
35. In bedrooms, the height of one window opening must be 44" or less above the floor, unless egress is accomplished through a door to the outside.
36. Egress window wells must measure 36" out from house. If bottom of window well to top of window well is more than 44", a permanent ladder is required.
37. If the exercise room/office could possibly be used as a bedroom, either for your use, or listing the use when reselling the home, change the label on all copies of the plans. Provide all egress requirements for the window and a smoke detector. Note: the building code does not require bedrooms to have a closet.

38. Tempered glass is required when window is located within 24" of edge of doors.

HVAC (Heating Ventilation Air-Conditioning)

39. Provide Energy Efficiency documents, a Manual J & S, and a [gas line diagram](#) for any fuel burning appliances.
40. Provide a heat source to meet minimum code requirements. Portable space heaters are not allowed. If using a mini-split system, install per manufacturer's specs.
41. In rooms with no window, provide conditioned air and return air exchanges per code requirements.
42. Gas furnaces and water heaters may not be located in bedrooms, bathrooms or similar confined rooms. Furnace rooms may not open into such rooms.
43. If outside cold air is supplied into the mechanical room through an opening to the exterior, install insulation (R-13 walls; R-30 ceiling) with a barrier on both sides of interior walls and ceiling, and a weather-stripped door sealed on 4 sides. All water lines and ducts in the room are to be insulated. Where the combustion air duct passes through conditioned space, a minimum R-8 insulation is required.
44. In mechanical room, at least one light shall be installed for servicing equipment. A wall or integral switch shall be at the usual point of entry. The light shall be at or near the equipment and switched independent of other lights.
45. Each appliance must be removable without moving the other.
46. Must have minimum 30" clear work space in front of controls; minimum 6" clearance from firebox to combustibles.
47. Provide at least one return air exchange.
48. Door swing must clear all appliances by 12" without the use of door stops or closures.

Electrical

49. New electrical loads cannot exceed the amperage provided by the existing electrical system.
50. Receptacle outlets in habitable rooms must be provided so any point along a wall does not exceed 6' distance to an outlet.
51. Small wall sections between doors require an outlet when 2 ft. or wider.
52. Hallways of 10 ft. or more in length shall have at least one receptacle outlet. The hall length shall be considered the length measured along the centerline of the hall without passing through a doorway.
53. GFCI protection device must be provided for receptacle outlets required at the bathroom basin, above kitchen counters and within 6' of a sink.
54. GFCI protected outlets must be provided within 25' of the mechanical room equipment.
55. All receptacles to be tamper-resistant.
56. Clearance of lights installed in clothes closets must comply with building code (see [Closet Light Requirements](#)).
57. Show light switches and lights. A switch-controlled light must be provided at hallways, stairways, exits and in each room.
58. Lights installed above a tub or in a shower enclosure shall be of the type that is listed for a wet location.
59. A smoke detector must be installed in each sleeping room and outside each separate sleeping area in the immediate

vicinity of the bedrooms, and shall be interconnected. A combination smoke detector/carbon monoxide is allowed.

60. Smoke detectors must be installed at least 3 feet away from the door to a bathroom. Smoke detectors must clear permanently installed cooking appliances at 20 feet for an ionization-type smoke alarm or 6 feet for a photoelectric-type smoke alarm.
61. A carbon monoxide detector shall be installed outside each separate sleeping area in the immediate vicinity of the bedrooms. A combination smoke detector/carbon monoxide is allowed.
62. A GFCI protected receptacle outlet must be provided at each section of kitchen countertop 12" or wider. Receptacle outlets shall be installed so that no point along the wall line is more than 24". There must be a minimum of two (2) 20-amp dedicated countertop circuits, as applicable.
63. If a GFCI protected receptacle outlet is installed at the island countertop, peninsula countertop or work surface, then receptacles shall be located in one or more of the following areas:
- on or above, but not more than 20 inches (508mm) above a countertop or work surface.
 - in countertop using receptacle outlet assemblies listed for use in countertops.
 - in a work surface using receptacle outlet assemblies listed for use in work surface or listed for use in countertops. Receptacle outlets rendered not readily accessible by appliance fastened in place, appliance garages, sinks, or range tops as covered in exception E3901.4.1 or appliances occupying assigned spaces shall not be considered as these required outlets.
 - under the countertop not more than 14" from the bottom leading edge of the countertop.
64. If a receptacle outlet is not provided to serve an island or peninsula countertop or work surface, provisions for future addition of receptacle outlet to serve the island or peninsula countertop or work space.
65. The outlet for the dishwasher must be GFCI protected.
66. Install anti-tip bracket on range as required by the manufacturer.
67. In laundry rooms, a minimum of one 20-amp circuit for outlets only shall be provided. All outlets installed in laundry areas are to be GFCI protected. The maximum length of a clothes dryer duct is 35 ft., or less if fittings are used, or per manufacturer's instructions.
68. Show location of electrical panel. Electrical panels cannot be located in a bathroom or closet. There must be 36" of working space clearance in front of the panel.

Plumbing

69. All plumbing fixtures must be properly trapped and vented.
70. Bathrooms and toilet rooms without an openable window require a minimum 50 CFM fan vented to the exterior with a listed rodent-proof cover.

Additional items: _____

IRC TABLE R302.1 EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour – tested in accordance with ASTM E119, UL 263 or Section 703.3 of the <i>International Building Code</i> with exposure from both sides	0 feet
	Not fire-resistance rated	0 hours	≥ 5 feet
Projections	Not allowed	NA	< 2 feet
	Fire-resistance rated	1 hour on the underside, or heavy timber, or fire-retardant-treated wood ^{a,b}	≥ 2 feet to < 5 feet
	Not fire-resistance rated	0 hours	≥ 5 feet
Openings in walls	Not allowed	NA	< 3 feet
	25% maximum of wall area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	3 feet

NA = Not Applicable

- a. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
- b. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.