## Appendix A. Specially Adapted Housing (SAH) Minimum Property Requirements and Recommended Adaptations

## Overview

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| In this Chapter | This chapter contains the following topics. |

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| Topic | Topic Name  | See Page |
| 1 | General Information about SAH Minimum Property Requirements | A-2 |
| 2 | SAH Minimum Property Requirements: Ingress and Egress Requirements | A-5 |
| 3 | SAH Minimum Property Requirements: Primary Bathroom Requirements | A-9 |
| 4 | SAH Minimum Property Requirements: Primary Bedroom/Sleeping Area Requirements | A-11 |
| 5 | Minimum Property Requirements for Condominiums and Townhouses | A-12 |
| 6 | General Information about SAH Recommended Adaptations | A-14 |
| 7 | SAH Recommended Adaptations | A-18 |
| 8 | Special Equipment | A-23 |
| 9 | Recommended Adaptations for Burn Injuries and Respiratory Related Injuries | A-24 |

####  1. General Information about SAH Minimum Property Requirements

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| a. Definition | Minimum Property Requirements (MPRs) are absolute conditions specified under governing law for the Specially Adapted Housing (SAH) grant. |

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| b. Statutory Requirement | 38 United States Code (U.S.C.), Chapter 21 or 38 Code of Federal Regulations (CFR) 36.4401 through 36.4410 mandates that any housing unit acquired, constructed, or remodeled using proceeds from the SAH grant program must:* comply with the MPRs, and
* include features necessary to accommodate the Veteran’s disabilities.
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| c. Required Areas | In order to obtain grant approval, the following areas must satisfy the MPRs detailed in Appendix A:* points of ingress and egress,
* primary bathroom, and
* primary bedroom/sleeping area
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| d. Exception | Adherence to MPRs is excused when compliance is not feasible and the Veteran requests an MPR waiver that is approved by the Regional Loan Center (RLC). There is a need for flexibility and the exercise of judgment based on the physical abilities and limitations of each Veteran. In some instances, the nature of a Veteran’s condition may obviate the necessity for a specific MPR. In these limited situations, the Regional Loan Center (RLC) may approve an MPR waiver request from the Veteran. ***Note*:**Because MPRs are limited to three specific areas, MPR waivers should be the exception, not the norm. Moreover, MPR waivers should be based on feasibility and need, not personal preference. ***Reference*:**For more information about MPR waivers, see Chapter 5, Section 3, Proposed Adaptations and Waivers. |

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####  1. General Information about SAH Minimum Property Requirements, continued

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| e. Example 1 | ***Situation***: A Veteran is in the advanced stages of multiple sclerosis and is primarily bed ridden. The only bathroom feature the Veteran is able to use is the shower and this is done so with the assistance of a caregiver. |
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|  | ***Result:*** Because the only bathroom feature the Veteran is able to use is the shower, there is no need to adapt the sink and toilet in the primary adapted bathroom. The Veteran may request a waiver for these features for consideration by the RLC. However, the other MPRs in the primary, adapted bathroom, such as the roll-in shower, accessible floor area, and 36-inch wide entry door, must remain as part of the project and be improved upon as necessary. For example, MPRs only require a 5-foot turning area and a 4-foot by 4-foot roll-in shower, but it may be more helpful to the Veteran and caregiver to have a 6-foot turning area and a 5-foot by 8-foot roll-in shower to accommodate the partially reclined wheelchair used to transport the Veteran.  |

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| f. Example 2 | ***Situation***: During the planning phase, a Veteran has decided that he/she does not want a primary, adapted bathroom that meets the MPRs detailed in Appendix A, Section 3. The Veteran has indicated that the current bathroom meets his/her current needs. Because the housing unit to be adapted is located in an area with significant snowfall, the Veteran wants to use the grant funds to construct an attached garage with a vertical platform lift to provide a covered means of ingress/egress. The garage would meet the specifications described in the recommended adaptations (RAs) in Appendix A, Section 7. |
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|  | ***Result:*** While it would be very beneficial to use grant funds to provide a covered means of ingress/egress for the Veteran, it is not acceptable to waive the primary, adapted bathroom and other major MPRs simply because the Veteran does not want them. As instructed earlier in this section, MPR waivers should be based on need, not personal preference. The Veteran must be able to explain why the elimination of this MPR would provide a greater benefit to him/her than its inclusion. If the Veteran is unable to provide adequate justification, the appropriate course of action is to satisfy the MPRs first and then include RAs, like the attached garage, if there are additional grant funds available. |

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#### 1. General Information about SAH Minimum Property Requirements, continued

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| g. Example 3 | ***Situation***: A Veteran and builder are in the final planning stages of the construction project. Based on the plans and scope of work the builder has developed, all of the SAH MPRs will be met except for the primary, adapted bedroom door. The builder has informed the Veteran that the hallway leading to the primary, adapted bedroom is only 38 inches wide and both of the hallway walls are load bearing. Therefore, it is not possible to widen the hallway, and the widest door opening the builder can provide for the primary, adapted bedroom is 34 inches. |
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|  | ***Result:*** This situation addresses feasibility. Because it is not feasible, or possible, to widen the hallway in order to accommodate a 36-inch wide door to the primary, adapted bedroom, it is acceptable in this case for the RLC to approve the MPR waiver requested by the Veteran.  |

####  2. SAH Minimum Property Requirements: Ingress and Egress Requirements

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| a. Number and Location | An adapted housing unit must have a minimum of two ingress and egress points that satisfy the MPRs presented in this section. The location and types of ingress and egress points are determined by the topography, floor plan, and Veteran preference. However, at a minimum, the two ingress and egress points must:* provide a proximate means of emergency egress from the primary, adapted bedroom/sleeping area, and
* be located at different locations within the house.

It is preferable that the emergency egress location be directly from the primary, adapted bedroom/sleeping area. If this is not possible, the emergency egress must be proximate to the primary, adapted bedroom/sleeping area. It must also be free of potential fire hazards and not pass through, or originate in, an area prone to potential fire hazards such as the kitchen, garage, utility room, or any room containing a heat source.Additional instructions regarding bedroom window egress requirements are provided in Appendix A, Section 4. |

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| b. Doorway and Entrance Requirements | All doorways that are adapted ingress and egress routes must:* have a minimum width of 36 inches, and
* have a beveled threshold with a maximum height of ½ inch.
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| c. Types of Ingress and Egress | There are several types of ingress and egress that satisfy MPRs. They may be used interchangeably:* no-step entry,
* vertical platform lift (VPL),
* elevator, or
* ramp or walkway.
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####  2. SAH Minimum Property Requirements: Ingress and Egress Requirements, continued

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| d. No-step Entry | A no-step entry may be sufficient when topography and grading eliminate the need for a ramp, lift or elevator (e.g. a housing unit built on slab). The no-step entry must meet the doorway and entrance requirements discussed earlier in this section. For entries in which the difference between the exterior grade/elevation and the interior/finished floor elevation is less than 4 inches, a transition is acceptable and a 5-foot by 5-foot platform accompanied by a ramp is unnecessary. The transition must be:* immobile,
* constructed of a durable material other than wood,
* provide unimpeded ingress/egress, and
* complement the Veteran’s condition and choice of wheelchair.
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| e. VPL | A VPL is a mechanical device capable of providing a vertical means of ingress and egress in locations where ramps are not feasible due to topography or space constraints. The weight capacity and lift height vary by model and manufacturer; however, a VPL must**:** * have a platform with a minimum usable width of 36 inches by 48 inches, and
* be connected to a continuous power source such as a generator or battery back-up.
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####  2. SAH Minimum Property Requirements: Ingress and Egress Requirements, continued

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| f. Elevator | Elevators, either internal or external, are also capable of providing a vertical means of ingress/egress. An elevator must have the following:* a car with minimum interior dimensions of 48 inches by 48 inches,
* a 36-inch wide entry door/opening,
* a connection to a continuous power source such as a generator or battery back-up, and
* be equipped with a land line telephone to communicate with emergency personnel in case of entrapment caused by a power outage or mechanical failure.

***Note*:** The Veteran should notify local emergency personnel, if applicable, of his/her dependence on an elevator as a means of ingress/egress. This is an added safety measure in the event of complete power/mechanical failure and loss of telephone connectivity. |

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| g. Ramps and Walkways | Ramps and walkways should be constructed of concrete, masonry, wood, metal, or composite materials and must:* be permanently installed;
* have a minimum width of 42 inches (existing) or 48 inches (new); and
* be constructed in a manner that prevents slipping in wet or icy conditions (e.g. broom finish for concrete surfaces, ¼ inch spacing between deck boards, metal grating, or built-in heating coils).

For ramps or walkways that are more than 4 inches above grade and that cannot be constructed in a way to eliminate accidental falling, a low curb or guardrail on both sides with a minimum height of 5 inches is required. ***Note*:** This requirement can usually be avoided by backfilling soil along the walkway to provide a reasonably level transition between the walkway and adjacent soil. *Continued on next page*

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|  2. SAH Minimum Property Requirements: Ingress and Egress Requirements, continued |
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| g. Ramps and Walkways, continued | Ramps and walkways must also have:* A slope of eight percent or less (i.e. for every 1 inch of rise there is 12.5 inches of run or more)
* A handrail that meets the following criteria:
	+ installed at a height convenient to the Veteran,
	+ minimum diameter of 1-1/2 inches,
	+ clearance from mounting surface of 1-1/2 inches to 2 inches,
	+ smooth continuous surface, and
	+ installed on both sides of the ramp with a minimum of 42 inches of clearance between handrails.
* A platform that meets the following criteria:
	+ located at any wheelchair entrance,
	+ provided at every 30 feet or less of continuous ramp,
	+ located at turns in the ramp greater than 45 degrees,
	+ minimum size of 5 feet by 5 feet unhindered by handrails or gutters,
	+ constructed of non-slip materials, and
	+ have a reasonably level surface.
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|  | If the slope of the ramp/walkway is less than five percent, a handrail is not required. However, the ramp/walkway must have a low curb/guard rail on both sides with a minimum height of 5 inches if the ramp/walkway is more than 4 inches above grade. See the note above about using backfill to avoid this requirement.***Important*:** It is acceptable to use an existing modular ramp provided by Prosthetics and Sensory Aids as one of the approved ingress and egress points, as long as the condition of the ramp is deemed safe by the SAH Agent. However, new modular ramps must be permanently installed and meet the MPRs discussed in this section. |

####  3. SAH Minimum Property Requirements: Primary Bathroom Requirements

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| a. Number and Location | At a minimum, an adapted housing unit musthave one fully adapted bathroom that satisfies the MPRs presented in this section. The primary, adapted bathroom must be in a location that is convenient and accessible for the Veteran. |

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| b. Required Features | The following features are required in an adapted bathroom:* roll-in shower,
* accessible sink,
* accessible toilet,
* accessible floor area, and
* 36-inch wide entry door.
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| c. Roll-in Shower | The roll-in shower must have the following features:* minimum interior dimensions of 48 inches x 48 inches,
* a minimum opening of 36 inches,
* non-slip flooring with a coefficient of friction (COF) of 0.60 or greater,
* a maximum floor slope of ¼ inch to 12 inches (i.e. 1-inch slope from front to rear in a 48-inch deep roll-in shower),
* at least one grab bar per wall placed at a location convenient to the Veteran and capable of supporting the Veteran’s weight,
* at least one hand held shower head, and
* accessible, thermostatic or pressure-balance controls to avoid sudden changes in water temperature.
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| d. Accessible Sink | The adapted bathroom must be equipped with at least one roll-under, wall hung, or pedestal sink that is accessible. The width, height, and depth of the sink should be convenient for the Veteran. Any exposed pipes must be wrapped, or covered, in case of accidental contact by the Veteran. |

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####  3. SAH Minimum Property Requirements: Primary Bathroom Requirements, continued

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| e. Accessible Toilet | Toilets must have:* a 48-inch clear front transfer space or a 36-inch clear side transfer space, and
* a minimum of one grab bar installed at a location that is convenient to the Veteran.

***Note*:** Although only one grab bar is required at the toilet, the Veteran should be encouraged to install as many as needed. The height and type of toilet should be determined by the Veteran. |

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| f. Accessible Floor Area | Floor areas must:* allow at least one clear area for maneuvering with a minimum diameter of 5 feet (the turning area may extend into the roll-in shower), and
* be non-slip in both wet and dry conditions with a COF of 0.60 or greater.
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| g. Entry Door | Entry doors to the adapted bathroom must:* have a minimum opening of 36 inches,
* not intrude on the accessible floor area (i.e. doors must swing outward or slide, such as a pocket door), and
* not obstruct wheelchair maneuvering when open.
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#### 4. SAH Minimum Property Requirements: Primary Bedroom/Sleeping Area Requirements

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| a. Number and Location | At a minimum, an adapted housing unit musthave one adapted bedroom/sleeping area that satisfies the MPRs presented in this section. |

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| b. Required Features | The following features are required in an adapted bedroom/sleeping area:* 36-inch wide entry door,
* sufficient space for maneuvering,
* accessible flooring, and
* proximate emergency egress.
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| c. Entry Doors | Entry doors to the primary adapted bedroom/sleeping area must:* have a minimum opening of 36 inches, and
* not obstruct wheelchair maneuvering when open.
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| d. Sufficient Space | The primary adapted bedroom/sleeping area must be sufficient enough in size to accommodate furniture while allowing the Veteran freedom of movement. |

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| e. Flooring | The flooring type must:* not impede wheelchair maneuverability, and
* be low pile, closely woven and padded with a durable fiber type, if carpeted.
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| f. Emergency Egress | As previously discussed, the primary adapted bedroom/sleeping area must, whenever possible, be equipped with an emergency egress point. If this is not possible, and the emergency egress point is proximate rather than direct, the primary adapted bedroom/sleeping area must have a window of sufficient size to allow access by emergency personnel. Local building code requirements should be consulted to establish acceptable design parameters. |

####  5. Minimum Property Requirements for Condominiums and Townhouses

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| a. Introduction | This topic contains information about condominium and townhouse requirements, including:* requirements for units above the first floor,
* ingress and egress,
* evacuations and safety considerations, and
* windows and balconies.

***Important*:**Primary bathroom and bedroom/sleeping area MPRs apply to condominiums and townhouses as described in the previous section. |

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| b. Require-ments for Units Located Above the First Floor | If a Veteran resides in a condominium or townhouse, it is preferable that the unit be located on the first floor. However, if the unit is located above the first floor, the following areas must be addressed:* ingress and egress,
* emergency access,
* windows, and
* balconies.
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| c. Ingress and Egress | At least one suitable means of access must be provided so the Veteran has a level ingress and egress point from the condominium or townhouse. In the absence of a level ingress/egress point, it may be necessary to utilize ramps, platforms, or elevators to eliminate any elevation difference between interior and exterior floor levels.***Note*:** Condominiums or townhouses located above the first floor only require a single SAH MPR compliant exit. |

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## 5. Minimum Property Requirements for Condominiums and Townhouses, continued

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| d. Windows | At least one window must be of sufficient size to allow access by emergency personnel. Local building code requirements should be consulted to establish acceptable design parameters. |

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| e. Balconies | Veterans should be encouraged to purchase a condominium or townhouse with balconies that are accessible to emergency personnel and the Veteran. |

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| f. Evacuations and Safety Considerations | The table below describes the evacuation and safety requirements: |
| Access | Requirement |
| Exterior Emergency Access | * The condominium or townhouse unit must be accessible using firefighting and evacuation equipment from the exterior of the unit.
* The location of the Veteran’s condominium or townhouse unit must be registered with local emergency personnel.

No unit may be located beyond the reach of the highest evacuation ladder system available to local emergency personnel. The SAH Agent must verify the capabilities of local emergency personnel servicing the Veteran’s property and upload supporting documentation in the system. |
| Interior Emergency Access | * If the Veteran is completely bedridden, the condominium or townhouse unit must contain an externally mounted device (audible, visible, etc.) which aids emergency personnel in locating the Veteran.
* The Veteran’s bedroom window must:
	+ be of sufficient size to allow access by emergency personnel, and
	+ have exterior markings to guide emergency personnel.
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#### 6. General Information about SAH Recommended Adaptations

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| a. Definition | Recommended Adaptations (RAs) are suggested modifications above and beyond the MPRs. They are not required to obtain grant approval. RAs were developed over time by SAH program experts who have gained an understanding of the residential needs of Veterans eligible for the SAH grant.  |

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| b. Reasonably Necessary Adaptations for SAH Cases | The following RAs, which are detailed in Appendix A, Sections 7, are considered reasonably necessary in SAH cases:* doorways,
* hallways,
* garages, carports, and passageways,
* driveways and exterior walkways,
* bathrooms,
* bedrooms,
* kitchens,
* maintenance free materials,
* heating and air conditioning,
* electrical equipment,
* security and emergency equipment,
* windows,
* flooring materials, and
* laundry room.
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| c. Flexibility and Exercise of Judgment | There is a need for flexibility and the exercise of judgment based on the physical capabilities and limitations of each Veteran. Equally important is the need to anticipate the Veteran’s future needs. SAH Agents should assist the Veteran in using a modular approach to adapting the housing unit. That is, RAs should be chosen by the Veteran on an as needed, or as desired, basis once the MPRs have been satisfied. SAH Agents can contribute significantly to this process by merging awareness of the Veteran’s capabilities and future needs with a thorough understanding of the RAs and their own past experience. |

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#### 6. General Information about SAH Recommended Adaptations, continued

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| d. Waiver and Approval | Because RAs are not required for grant approval, a waiver process is not necessary. It is not a requirement that every RA be incorporated into the design of each room, or area, being adapted. Veterans have freedom of choice and may select individual features.The specifications provided for each RA in this section are not absolute. However, they should be adhered to when possible as they represent adaptations that have been field tested. RLCs have flexibility in approving minor variations in the specifications provided in this section. A formal approval process is not required for minor variations in RAs. However, RLCs should exercise sound judgment in determining which variations are acceptable. If the variation is significant, RLCs should question whether it is appropriate to spend grant funds on the modification. |

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| e. Limitations | Although the purpose of creating RAs is to introduce greater flexibility to the SAH Grant program, it is important to remember that grant funds must only be used for adaptations that benefit the Veteran. VA Central Office (CO) may consider exceptions to this rule if it is determined that the proposed adaptations are necessary for the Veteran’s caregiver and will improve the Veteran’s quality of life. The request must be submitted by the Veteran, along with justification for the adaptation. The RLC must submit this request along with a recommendation to CO for approval.The list of RAs is substantial, but not all-inclusive. Therefore, if a Veteran desires an adaptation not included in Appendix A, Section 7, a request must be submitted by the Veteran, along with justification for the adaptation. The RLC must submit that request along with a recommendation to CO for approval.***Important*:**Grant funds must not be used to cure deferred maintenance.  |

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#### 6. General Information about SAH Recommended Adaptations, continued

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| f. Exceptions | It is the responsibility of the SAH Agent, Assistant Valuation Officer (AVO), or Valuation Officer (VO) to determine which RAs are best suited for the Veteran based on the initial interview and feasibility study. If an RA is deemed necessary by the SAH Agent, AVO, or VO, it must be elevated to a to MPR status (a requirement for grant approval).If the Veteran does not wish to comply with the new requirement, the Veteran must submit a signed waiver request, along with justification, to the RLC for approval by the Assistant Loan Guaranty Officer or Loan Guaranty Officer.  |

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| g. Example 1 | ***Situation:*** A Veteran’s elderly spouse, who functions as the caregiver, prepares the Veteran’s meals and washes the laundry. As part of the proposed adaptation project, the Veteran has requested new kitchen and laundry room appliances. The Veteran’s condition requires a special diet which his spouse has difficulty preparing using the outdated kitchen. Moreover, the Veteran’s condition creates a large volume of laundry and the Veteran’s spouse has difficulty managing this volume with the older, top loading washer and dryer. ***Result:*** In most cases, new kitchen and laundry room appliances would be unacceptable if they were not going to be used by the Veteran. However, in this case, an argument can be made that the Veteran will benefit directly from new kitchen appliances as they will be used to prepare meals required for his special diet. In addition, a new, elevated, front loading washer and dryer will assist the Veteran’s elderly spouse in providing appropriate care in the form of clean linens and clothing for the Veteran’s use. Assuming the MPRs will be satisfied and there are sufficient funds, the appropriate course of action is for the Veteran to submit a request for this exception to the RLC. The request must then be sent to CO for approval.  |

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#### 6. General Information about SAH Recommended Adaptations, continued

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| h. Example 2 | ***Situation:*** An SAH Agent recently received the plans, contract, scope of work, and cost breakdown for a proposed adaptation project. The builder has included carpet replacement and interior painting for two secondary bedrooms that the Veteran does not use and will not access. ***Result:*** These items are considered to be deferred maintenance and are outside of the acceptable scope of work for an adapted housing project. However, the Veteran may elect to use personal funds to pay for these renovations. Preferably, a separate contract, to be managed outside of the adapted housing project, will be created for this work. If not, the RLC must clearly document the cost attributed to these renovations and the source of the funds. |

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| i. Example 3 | ***Situation:*** A Veteran has requested a new, detached, one-car garage as part of the proposed adaptation project. The proposed dimensions are 12 feet by 18 feet, which are insufficient to store the Veteran’s adapted van and allow for ingress/egress using the vehicle ramp. All other MPRs for the housing unit will be satisfied once the project is complete. ***Result:*** Per the RAs in Appendix A, Section 7, the recommended size for a one car garage is 14 ½ feet by 24 feet. The proposed garage is a major deviation from the specifications for a one car garage and the RLC should not approve this portion of the project. Normally, a garage large enough to provide a covered means of ingress/egress for the Veteran would surely be beneficial. However, the proposed garage in this case is only large enough for car storage. Therefore, it is not appropriate to use grant funds for a portion of the project that does not result in a usable, adapted feature.  |

####  7. SAH Recommended Adaptations

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| a. Doorways and Hallways  | To ensure freedom of movement and convenience throughout an adapted housing unit, the following doorway and hallway specifications are considered reasonable:* New interior and exterior doorways that are a minimum of 36 inches wide
* Existing interior doorways that are a minimum of 32 inches wide
* Thresholds that are beveled with a maximum height of ½ inch
* Provide protection from inclement weather at ingress and egress points using a stoop, canopy, or overhang
* New hallways that are a minimum of 48 inches wide
* Existing hallways that area a minimum 42 inches wide
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| b. Garages, Carports, and Passageways | The following garage specifications are considered reasonable:* A single-car garage or carport that is at least 14 ½ feet by 24 feet
* A double car garage or carport that is at least 24 feet by 24 feet
* The door height of an existing garage that is 7 feet
* The door height of a new garage that is 8 feet
* The width of the garage should be sufficient to include:
	+ 5 feet of unrestricted, wheelchair maneuverability on at least one side of the vehicle, and
	+ ample space to park specially equipped vehicles and operate a device, such as a mobile lift or vehicle ramp, that provides the Veteran with access to the vehicle.

If the garage or carport is detached, it is acceptable to install a connecting ramp/walkway that adheres to the ramp/walkway specifications outlined in the MPR section of Appendix A, Section 2. If possible, it should be covered to protect the Veteran from exposure to inclement weather. |

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**7. SAH Recommended Adaptations, continued**

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| c. Driveways and Walkways | Hard surface driveways are considered to be a reasonable adaptation and should:* Be constructed of a material that does not impede wheelchair maneuverability
* Be constructed in a manner that prevents slipping in wet or icy conditions (broom finish for concrete surfaces)
* Have a slope of 8 percent or less (i.e. for every 1 inch of rise there is 12 ½ inches of run or more)

In some cases, site topography will inhibit the ability to construct a driveway that meets the 8 percent slope requirement. In cases such as this, the driveway should:* Terminate at a reasonably level parking pad of sufficient size to accommodate the Veteran’s vehicle and ingress/egress from the vehicle
* Be equipped with a safety barrier, such as curb or speed hump, to prevent unintended access to the steeply sloping portion of the driveway

Installation of hard surface, non-egress walkways is also considered reasonable and the specifications outlined in Section 2 of this Appendix should be adhered to as closely as possible.  |

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| d. Bathrooms | Most of the bathroom adaptations are contained in Section 3. In addition, the following adaptations are deemed reasonably necessary:* An accessible medicine cabinet placed at a convenient height
* A mirror placed at a height that provides adequate visibility
* Cabinets with pull-out shelving and/or sliding doors
* Closets with accessible shelving
* Single-lever faucets
* Additional grab bars
* Built-in or folding shower benches
* Comfort height toilets with a bidet seat or a separate bidet unit
* Accessible tubs with:
	+ a transfer platform,
	+ an accessible, single lever faucet that is thermostatic or pressure-balance controlled to prevent sudden water temperature changes,
	+ grab bars in convenient locations, and
	+ sufficient clearance to allow for unobstructed access.
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**7. SAH Recommended Adaptations, continued**

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| e. Bedrooms | Reasonably necessary bedroom adaptations include:* One clear area for maneuvering with a minimum diameter of 5 feet
* A minimum 4-foot clear access area in front of the closet
* A clear space of 4 feet between the end of the bed and opposing wall
* An accessible closet with a minimum 36-inch opening and shelving installed at a height that can be reached from a seated position
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| f. Kitchen | The kitchen layout should allow for adequate maneuvering room for the Veteran and have a turning area with a minimum 5-foot diameter. The following kitchen adaptations are considered to be reasonably necessary:* Roll-under work counter with a width and height that is convenient
* Roll-under sink with a width and height that is convenient
* Single lever faucets
* Accessible cabinets and closets with pull-out shelving and/or sliding doors
* Electrical outlets and switches that are within reach
* Accessible dishwasher
* Side-by-side refrigerator
* Built-in, roll-under cooktop with front control
* Built-in oven installed at a convenient height
* Free standing range with front controls
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| g. Maintenance-Free materials | The use of durable, maintenance-free materials is desired. Examples include:* Vinyl or composite siding
* Clad windows
* Composite exterior doors
* Wood composite for decks and porches

***Note*:** When a new addition is constructed, it is acceptable, within reason, to install maintenance free materials on the existing home to match the new addition.  |

*Continued on next page*

**7. SAH Recommended Adaptations, continued**

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| h. Heating and Air Conditioning | Heating and air conditioning systems should:* meet or exceed building code requirements;
* be adequate for healthful and comfortable living;
* be designed to meet the Veteran’s needs (zoned, individual units, etc.); and
* be equipped with a thermostat or controls that are accessible by the Veteran.
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| i. Electrical Equipment | Wall switches and electrical outlets should be located in positions that are unobstructed and at heights that are convenient to the Veteran. Typically, they are located 18 inches (minimum) to 48 inches (maximum) from the floor in an adapted housing unit.Electrical utility boxes should be located so the Veteran has unobstructed access from a wheelchair. Typically, they are located near an egress point with a maximum height of 48 inches to the top breaker.Other utility controls, including appliance controls and garage door openers, should be located in positions that are unobstructed and convenient for the Veteran. |

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| j. Security and Emergency Equipment | Smoke detectors should be should be installed according to local building code requirements. Usually, this requires that smoke detectors be installed in the main portion of each living area, on each level of the house, and at the entrance to each bedroom. Other acceptable security and emergency equipment includes:* alarm systems,
* security cameras,
* intercom systems (excluding whole house audio systems),
* flood lights/security lights with motion sensors,
* privacy fencing,
* carbon monoxide detectors,
* keyless entry,
* automatic door openers/closers,
* fire sprinkler systems, and
* storm shelters installed to local building code requirements.
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**7. SAH Recommended Adaptations, continued**

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| k. Windows | Windows should be durable, low maintenance, and energy efficient. They should also:* be operable from a wheelchair in a seated position;
* have a maximum sill height of 2 feet 9 inches;
* be located so the Veteran has maximum visibility; and
* have locks that are operable from a wheelchair in a seated position.
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| l. Flooring Materials | It is reasonable to replace floor coverings in rooms the Veteran accesses; however, the type of floor covering used must not impede maneuverability. When possible, floor coverings should be durable and low maintenance (e.g. hardwood, ceramic tile or vinyl). Interior floor coverings at ingress and egress points should be of non-slip materials under both wet and dry conditions. Carpeted floor coverings should be low pile, closely woven, and padded with a durable fiber type. ***Note*:** Replacing older, worn carpet that impedes wheelchair maneuverability is acceptable but the carpet installed must be low pile, closely woven and padded with a durable fiber pad. Use of the grant is not intended to replace older, worn carpet simply for aesthetic purposes.  |

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| m. Laundry Room | An adapted laundry room should have:* a clear area for maneuvering with a minimum diameter of 5 feet,
* a front loading washer and dryer, and
* washer and dryer stands, if necessary.
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####  8. Special Equipment

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| Change Date | December XX, 2013, Change 1* This entire section has been updated.
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| a. Introduction  | Special equipment is deemed reasonably necessary if it is required to preserve the Veteran’s health or contributes to his/her quality of life. Because there are other sources of funding for special equipment, such as Prosthetics and Sensory Aids and Vocational Rehabilitation and Employment, it is important that SAH Agents encourage Veterans to work with other program areas to maximize any and all available benefits. |

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| b. RLC- Approved Equipment | The following special equipment is considered to be reasonably necessary and should be approved by the RLC:* elevators,
* VPLs,
* stair lifts,
* ceiling track systems, and
* adaptive equipment used to improve the quality of life.
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| c. CO- Approved Equipment  | The following special equipment must be approved by CO:* whole house generators,
* pools,
* therapy tubs or hot tubs, and
* any special equipment not included in this section.

***Note*:** Special equipment approvals must be submitted by the Veteran, along with justification and a recommendation from the RLC, to CO. |

#### 9. Adaptations for Burn Injuries and Respiratory Related Injuries

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| Change Date | December XX, 2013, Change 1* This entire section has been updated.
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| a. Introduction | Veterans with respiratory related injuries, or severe burn injuries that reduce range of motion, may have needs that differ from other SAH eligible Veterans. It is important, especially in cases such as these, that each RLC has a flexible and expeditious approach to approving reasonable adaptations based on the specific needs of each Veteran. |

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| b. RLC- Approved Equipment | In addition to the other MPRs and RAs presented in Appendix A, the following adaptations are deemed reasonably necessary for Veterans with burn injuries or respiratory related injuries:* A larger bathtub or walk-in tub to minimize the range of motion required to enter/exit
* Enlarged showers to accommodate seating
* Motion/touch sensing faucets and light switches
* Integrated, whole-house climate and lighting controls (smart controls).
* Automatic door openers
* Accessible, custom closets and shelving
* Covered or enclosed patios, porches, entryways, retractable awnings, window tinting and/or window coverings to control sun exposure on the interior and exterior
* Conversion of basement areas to finished living areas that provide a comfortable environment free of sun exposure
* Room additions to store exercise equipment and/or other hobby related equipment
* Maintenance free building materials
* Invisible fencing, pet doors, and any other equipment related to accommodating a service dog assigned to the Veteran
* Air filtration and dehumidifying systems
* Replacement of carpet with hard surface flooring for dust control

***Note*:**As the types of injuries and treatments continue to change, new and creative adaptations may be deemed reasonably necessary. For adaptations that are not included in Appendix A, a request must be submitted by the Veteran, along with justification and a recommendation from the RLC, to CO. |

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