Interagency Grizzly Bear Committee

Bear-Resistant Container

Testing Program

Photo courtesy of the Living with Wildlife Foundation © LWWF 2007

Program Partners:

Grizzly & Wolf Discovery Center

Interagency Grizzly Bear Committee

Living with Wildlife Foundation

Montana Fish, Wildlife & Parks

Montana Fish, Wildlife & Parks Foundation

Montana Wildlife Center

U.S. Fish and Wildlife Service

U.S. Forest Service

Wyoming Game & Fish

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The Grizzly and Wolf Discovery Center (GWDC) is a not-for-profit bear and wolf preserve and a member of the American Zoo and Aquarium Association (AZA). For more information on the Center, please visit their web site at www.grizzlydiscoveryctr.com

We would also like to sincerely thank the Montana Fish, Wildlife & Parks Foundation for their generous financial support for this important program.

Participating Groups and Agencies

Grizzly & Wolf Discovery Center
Interagency Grizzly Bear Committee
Living with Wildlife Foundation
Montana Fish, Wildlife & Parks
Montana Fish, Wildlife & Parks Foundation
Montana Wildlife Center
U.S. Fish and Wildlife Service
U.S. Forest Service
Wyoming Game & Fish

Table of Contents

Introduction

Increasing numbers of humans are encountering black bears and grizzly bears while living in or visiting areas inhabited by bears. In some cases, these encounters lead to conflicts between humans and bears. Various wildlife and recreation agencies, in addition to nonprofit conservation groups, private business, and others, have begun focusing efforts on ways to reduce potential conflicts. It has become apparent that one way to significantly reduce the likelihood of unacceptable human/bear encounters is to ensure that bears do not become conditioned to human provided attractants, such as garbage, dog food, bird seed, and other unnatural foods.

In 1989 the Interagency Grizzly Bear Committee (IGBC) developed the first consistent protocol for defining, testing and recommending minimum design standards for bear resistant containers (USDA Forest Service 1989). Over the past decade, there has been a great deal of progress made related to products and methods for securing attractants. Manufacturers and agency personnel have taken the lead in developing new and better products for securing garbage and other attractants, and there are now a host of options available to those wishing to store food, garbage and other attractants so they are unavailable to bears. Consumers now have a wide variety of bear-resistant options. And as new products are developed and materials and manufacturing processes evolved, a refined protocol is necessary to evaluate products in order to provide consistency and guidance to the public.

The U.S Forest Service is the lead agency for testing and approving products to be used on National Forest System, Bureau of Land Management and State Lands. Montana Fish, Wildlife and Parks and the Living with Wildlife Foundation are the leads for testing products to be used on private lands.

This testing protocol provides a means of evaluating the relative “bear-resistancy” of a wide range of products used to secure potential bear attractants. It also helps prevent ineffective products from being placed into use and leads to the discovery and development of new and improved bear-resistant products and options for deterring bears.

There are a number of reasons why it is important to test bear-resistant products; however, this testing program has three main objectives. The first involves testing and approval of products that may be used in grizzly bear areas in the lower 48 states on National Forest System Lands (USFS), Bureau of Land Management Lands (BLM) and State Lands with Food Storage regulations. The second objective is to promote and facilitate the

use of bear resistant equipment on private lands. The third objective is to provide information to the public and to agency personnel to help them make informed decisions when purchasing bear-resistant containers.

A wide range of products will be tested through this testing program. Some products are intended to be used by people recreating in bear country and some are more often used by people living in bear country. On USFS, BLM and State Lands in grizzly bear areas in the Lower 48 States, certain food storage regulations may apply. Therefore, people living and/or recreating in areas occupied by grizzly bears should consult with the appropriate land management agency to determine what laws or requirements apply.

Note: *Certain food storage regulations also apply on public lands in areas occupied by black bears. In some areas Public Land Managers request voluntary compliance with food storage recommendations. People living and/or recreating any where black or grizzly bears live should check with local wildlife officials to determine what laws or requirements exist in that specific area regarding securing and storing bear attractants. Information about who to contact for food storage regulations areas in California is provided at the end of this document.*

Types of Bear-Resistant Product Tests

As mentioned earlier, this protocol outlines the method for testing and approval of products used in grizzly bear areas on USFS, BLM and State Lands where regulations apply. It also provides a means for testing of other products that could be useful and effective for securing bear attractants on private lands. All products designed for use on private lands will undergo a visual inspection by approved testing personnel and will be tested using captive grizzly bears in West Yellowstone, Montana or at an alternate approved testing facility.

Commercially produced and personal use products that will be used in grizzly bear areas on USFS, BLM and State Lands with Food Storage regulations require a visual inspection and additional testing depending on the type of product before they will be approved or "certified." Please refer to the sub-section entitled "Testing of Products for Use in Grizzly Bear Areas on USFS, BLM, and State with Food Storage Regulations" for more information.

Figure 1: Type of tests for various categories of bear resistant products.

Required Test	Products used on USFS, BLM and State Lands with Food Storage Regulations			Products used on Private Lands where Food Storage Orders Do Not Apply
	Commercially produced		Personal use	
	Garbage containers and large food storage boxes (i.e. food storage lockers)	Small containers (backpacking containers and horse panniers)		
Visual Inspection	X	X	X	X
Penetrometer Test[1]	Conditional[1]	Conditional[1]		
Impact Test	Conditional[2]	X	Optional[3]	
Captive Bear Test	X	Optional[3]		X

1 The type of material determines the need for the penetrometer test; typically plastics or polymers are tested.
2 Depends on size and type of container.
3 Depends on results of visual inspection.

Visual Inspection

Visual inspection will look for openings, hinges, lids or coverings that would allow a bear to gain entry by breaking, bending, tearing, biting, or pulling with its claws. On smaller containers the gap must be 3/16" or less. No sharp corners or projections should be present. The latches must be easy to use, i.e. not a series of removable screws. Products that are intended to only be used on private lands will be visually inspected by authorized testing personnel before and after the required captive bear test. Photographs of products will be taken before and after testing.

Commercial products intended for use in areas occupied by grizzly bears on USFS Lands, BLM and State Lands where Food Storage Orders apply must pass a visual inspection (meets IGBC minimum design and structure regulations and USFS specifications) prior to the required impact test and/or captive bear test at one of the designated USFS testing facilities. Visual inspections for commercial products are conducted at the USFS facility in Missoula, MT or Cody, WY. Products will also be visually inspected at these facilities after the required tests for a final determination.

Visual inspections of products for personal use in grizzly bear areas on USFS, BLM and State Lands will be available at designated Agency offices.

Impact Test

Impact testing can be done at the USFS Missoula Technical Development Center in Missoula, Montana, or at the USFS testing facility in Dubois, Wyoming. The test involves the use of an approved impact-testing machine which drops a 100-pound weight from a height of two feet (this equals 200 foot-pounds of energy) above the weakest side of the container. The impact machine is designed to simulate the force that a bear can exert on a container. Containers will be considered to have passed this test if they do not sustain any damage that results in an opening or gap of ¼ inch or greater anywhere on the container or any other damage that allows the container to be opened. If the containers are less than 18 inches in length and less than 10 inches in diameter, the container shall only have to withstand a 150 foot-pound energy load. (a 100 pound weight dropped a height of 1 ½ ft). If the container is round or irregular shaped, it will be placed on a sandbag, shaped to give more uniform support to the bottom of the container.

Penetrometer Test

If the container is made of a non-metalic material it will be required to pass a penetrometer test. Penetrometer testing can only be done at the USFS Missoula Technical Development Center in Missoula, Montana. This test is a mechanical method to determine if the container can withstand punctures from claws or biting. A metal penetrator, with a radius of 0.06 inches will be placed on the container edges where the animal can bite, and a static load of 125-135 pounds will be applied. The penetrator should not have pierced the material with that applied load. A number of points may be tested depending on the shape of the container.

Captive Grizzly Bear Test

Commercially produced garbage containers and other large food storage containers that cannot be adequately tested using the impact test and all containers designed for use only on private lands will be required to pass the captive bear test. The captive grizzly bear test will utilize live grizzly bears and will take place at the Grizzly and Wolf Discovery Center (GWDC) in West Yellowstone Montana or another approved facility. Testing personnel will prepare products by placing an appropriate food reward inside of the container and in some cases an attractant will be place on the outside of the container. Products may undergo testing by a number of bears and remain accessible

to bears until the product is breached or until a total of 60 minutes bear contact time has been reached.

Arranging for Product Testing

Testing of Products for Use in Grizzly Bear Areas on USFS, BLM, and State Lands with Food Storage Regulations.

IGBC certified containers are one of the methods available to meet USFS, BLM and State food storage regulations. Manufacturers and vendors who are interested in having bear-resistant storage containers tested to meet food storage regulations or for use in grizzly bear areas where food storage is recommended should contact one of the following individuals:

Dick Karsky	(US Forest Service)	(406) 329-3921	rkarsky@fs.fed.us
Kim Barber	(US Forest Service)	(307) 578-5135	krbarber@fs.fed.us
Jim Claar	(US Forest Service)	(406) 329-3664	jclaar@fs.fed.us
Mark Hinschberger	(US Forest Service)	(307) 455-2466	mhinschberger@fs.fed.us

Testing of Commercially Available Products

To receive IGBC certification, **commercially available products** will be evaluated at the USFS facility in Missoula, Montana, or Cody, Wyoming. The type and size of product will determine the type of tests required.

Small containers: This generally includes backpacking containers and horse panniers but could include a variety of small containers used to transport food and other attractants. The evaluation will include a visual inspection of the container and an impact test and/or penetrometer test, depending on the type of material. Products may then be taken to the GWDC, at the discretion of USFS product testers, for a third test utilizing captive grizzly bears. If deemed necessary, authorized USFS personnel will take the container(s) to the GWDC and oversee the testing of the product(s) at no charge to the producer. The need for the captive bear test will be based on the type of material used to construct the product and whether or not the basic product design has been tested in the past. A final visual inspection by authorized USFS product testers after the captive bear test will determine if the product will be certified as 'bear-resistant'.

A letter will be sent to manufacturers verifying the approval of their product and its use on Forest Service Lands and BLM and State Lands with Food Storage Regulations. Authorized

USFS product testers will work with manufacturers on products that do not pass and suggest modifications to make the container bear resistant. Modified products may require retesting. Products that are certified by USFS as "bear-resistant" will receive an individually numbered IGBC decal and a receipt of certification. [Exceptions: Garcia products (2 backpacker models) and Greenlee Mobile Storage Chest – Model 2448 are approved but do not have the IGBC decal attached].

Large containers: Some containers are too large to be tested using the impact testing machine. These generally include large food storage lockers or garbage containers. The evaluation of these containers will include a visual inspection of the container by authorized USFS product testers before the required captive bear test. A penetrometer test may be required depending on the type of material. A final visual inspection by USFS product testers at the facilities list above after the captive bear test will determine if the product will be certified as 'bear resistant'. Containers will be tested at the GWDC or other approved facility using the protocol beginning on page 12 for 'Testing of Products for use on Private Lands'. However, to meet requirements for use on USFS, BLM and State Lands with food storage regulations, the product must attain at least a **4** star rating (see page 15). This rating requires products to meet the requirement for 'user friendly' and 'low maintenance' shown on page 15. This determination will be made by authorized Forest Service product testers after the completion of the captive bear test.

Manufacturers will be notified if their product does not meet these requirements and provided suggestions for improvement. Approval of products for use on USFS, BLM and State Lands with food storage regulations and the rating received will be documented in writing to the producer. Products approved under this section of the protocol may not require an individually numbered IGBC decal.

Testing of containers Built for Personal Use

Courtesy inspection of containers that are **built for personal use** can be conducted at designated Agency offices in Idaho, western Montana, and western Wyoming. Individuals can construct containers for their personal use based on designs provided by the USFS or other sources. "Personal use" containers that pass the visual inspection will receive an individually numbered IGBC decal and inspection receipt. Contact one of the USFS personnel listed above for additional information.

NOTE

The USFS is currently testing electric fences in both the NCDE and the YE in partnership with MTFWP, Wyoming Game & Fish and others. The USFS examines the engineering and

electrical characteristics of the systems and performs field tests that are videoed before a system is approved. One system has already been approved for the NCDE as a means of meeting food storage regulations and is referenced in the NCDE food storage order (USFS Recreation Tech Tips 9923-2321-MTDC, March 1999).

People wishing to use portable electric fences (USFS Recreation Tech Tips 0723-2305-MTDC, March 2007) on USFS lands should contact Kim Barber at (307) 578-5135, Jim Claar (406) 329-3664 or Dick Karsky at (406) 329-3921 (USFS) for more information.

Testing of Bear-Resistant Products for Use on Private Lands

People who wish to test products for use on private lands only should contact Patti Sowka at (406) 544-5307 or psowka@mt.net. Products tested under this section of the protocol will undergo a visual inspection and captive grizzly test only.

Please note in order for products to be considered for use in grizzly bear areas on USFS lands and State and BLM lands where food storage regulations apply there are additional requirements. (See section above entitled "Testing of Products for Use in Grizzly Bear Areas on USFS, BLM and State Lands with Food Storage Regulations."

Testing Procedure

Testing Fees

To help cover administrative costs associated with this program, product vendors and manufacturers who have products tested under this section of the testing protocol will be charged a testing fee. The fee will be based on the amount of time and effort required to prepare products for testing.

In general, the testing fee for products that do not require placement by tractor and products that do not require bolting to a concrete pad will be $150.00. The fee for products that must be hauled into the habitat by forklift, tractor, or other equipment, and products that must be mounted or bolted to a concrete pad inside of the habitat will be $250.00. Products that do not last the minimum amount of time and are resubmitted will be assessed a reduced testing fee of $100 or $150 depending upon the type of product. LWWF will collect testing fees from the product manufacturer or representative prior to testing.

Agency personnel and private citizens wishing to test products for their own use will not be charged for testing. However, those testing products for their own use are welcome to contribute a tax-deductible donation to the LWWF to help with the testing program.

Testing Protocol

1. Product suppliers should submit any required testing fees and signed consent forms to Ms. Sowka at 5080 Hidden Valley Drive, Helena, MT 59602 prior to their scheduled test date. Checks should be made payable to: Living with Wildlife Foundation.
2. Containers will be inspected to ensure that they are free of sharp edges, sharp corners and points that may be harmful to the test bears.
3. Testing personnel will prepare products by placing an appropriate food reward inside of the container. Products which do not rely on an odor-proof barrier or liner will also have an attractant (i.e. honey, peanut butter or fish oil) applied to the outside of the product in vulnerable areas, such as seams, latches, and handles.
4. Products will be placed inside the bear habitat and bears will be allowed to interact with the products. Products may undergo testing by a number of bears of various sizes and with varying levels of experience related to accessing containers.
5. Testing personnel will monitor and videotape all product testing. Photos and video footage will remain the property of LWWF and may not be used under any circumstances without permission from LWWF. Release of photos and video footage is at the discretion of LWWF and may be released in certain circumstances to assist manufacturers in improving the design of products or for agencies and certain groups to use for educational purposes.
6. Products will remain accessible to bears until the product(s) is breached or until a total of 60 minutes of bear contact time has been reached. Bear contact time is defined as: biting, clawing, pounding, rolling, compressions, licking, or scratching by the test bear(s).
7. Manufacturers and vendors agree to let testing personnel determine which bears will be used for product testing and if and when, an adequate test has occurred.
8. Testing personnel will photograph products after testing is complete.
9. Detailed descriptions of areas where a product fails, if any, will be made on the product testing form and will be made available to the manufacturer/vendor for review upon request.
10. Product suppliers will arrange to have product(s) returned to them at their expense or will arrange for GWDC, LWWF, USFS or FWP to keep the tested product(s).
11. A container will be considered to have been breached if it is rendered non-functional, or if the hinges, seams or doors are breached and the bear gains entry at any of these points. Small gaps or puncture holes of ¼ inch or less may be acceptable based upon the container type and the intended use of the container.

12. Test personnel will perform the product test and notify vendors/manufacturers of the outcome after the test is complete. Test results will also be posted on the LWWF web site at www.lwwf.org.

Additional Information

- Manufacturers and vendors submitting products for testing may be required to sign a testing consent form prior to testing.
- Manufacturers submitting products that must be secured to a base or the concrete pad will provide LWWF with product specifications, directions for product installation, and a list of tools needed to properly install and operate the product.
- Product suppliers are responsible for having product(s) delivered to the testing site.
- Product testers reserve the right to refuse testing of products which may be dangerous (ex. sharp edges, protrusions, extremely heavy lids) for the test bears.
- Product testers reserve the right to select the bear or bears used in the product test.
- Vendors and manufacturers are invited to submit a picture of the tested product(s), pertinent product information, and a statement of permission to use the information to be included in the *Living with Predators Resource Guides.* The guides contain information on bear-resistant products and techniques. Interested vendors should contact Patti Sowka at the address and phone number listed in the "contacts" section at the end of this document.

Product Rating System

Products that undergo testing under this testing protocol will receive a rating based upon the length of time the products are able to withstand the forces exerted by the test bears. The longer a product is able to withstand the bears' contact, partially determines the rating (i.e. more stars) it will receive. 4 and 5 star ratings will be determined by authorized USFS product testers.

Time increments and the associated ratings are as follows:

★	Product remains intact and functional between 30 and 45 minutes
★★	Product remains intact and functional between 45 and 60 minutes
★★★	Product remains intact and functional for at least 60 minutes
★★★★	Product remains intact and functional for at least 60 minutes and meets Forest Service criteria for 'user friendly' and 'low maintenance' (see definitions below).
★ ★★★★	Product remains intact and functional for at least 60 minutes and meets Forest Service criteria for 'user friendly' and 'low maintenance' and the Americans with Disabilities (ADA) definition of handicapped accessible (see definitions below).

Note: ***Products to be used on USFS, BLM and State Lands with food storage regulations must have a 4 or 5 star rating.***

Definitions

User Friendly: Containers must have the capability to open easily and to seal upon release of the latch mechanism without the need for tools or additional latching mechanisms such as bolts, knobs or pins. Food storage lockers and other large containers may have knobs or pins but must have the capability to be sealed by the latching mechanisms easily and consistently. All containers must have the potential to seal consistently and easily under potentially severe weather conditions.

Low Maintenance: This determination is based on past documentation of containers and mechanisms that have required considerable maintenance and other considerations such as thickness of metal, potential for malfunction etc.

Commercial Containers: Containers developed by manufacturers that are designed to be sold to consumers.

Personnel Use Containers: Containers developed by an individual or individuals for personal use and not designed to be sold to consumers.

Requirements of the Americans with Disabilities Act:

4.2 Space Allowance and Reach Ranges.

4.2.4* Clear Floor or Ground Space for Wheelchairs.

4.2.4.1 Size and Approach. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 in by 48 in (760 mm by 1220 mm) (see Fig. 4(a)). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object (see Fig. 4(b) and (c)). Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.

4.2.4.2 Relationship of Maneuvering Clearance to Wheelchair Spaces. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in Fig. 4(d) and (e).

4.2.4.3 Surfaces for Wheelchair Spaces. Clear floor or ground spaces for wheelchairs shall comply with 4.5. Appendix Note

4.2.5* Forward Reach. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 in (1220 mm) (see Fig. 5(a)). The minimum low forward reach is 15 in (380 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b). Appendix Note

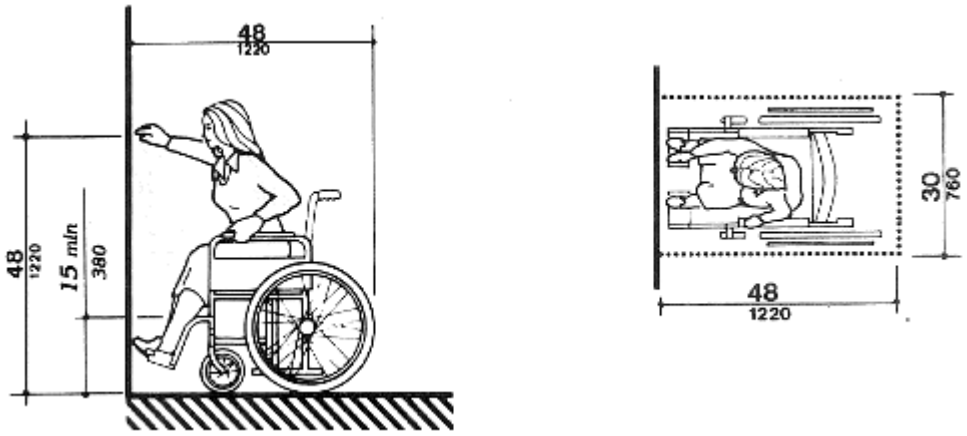
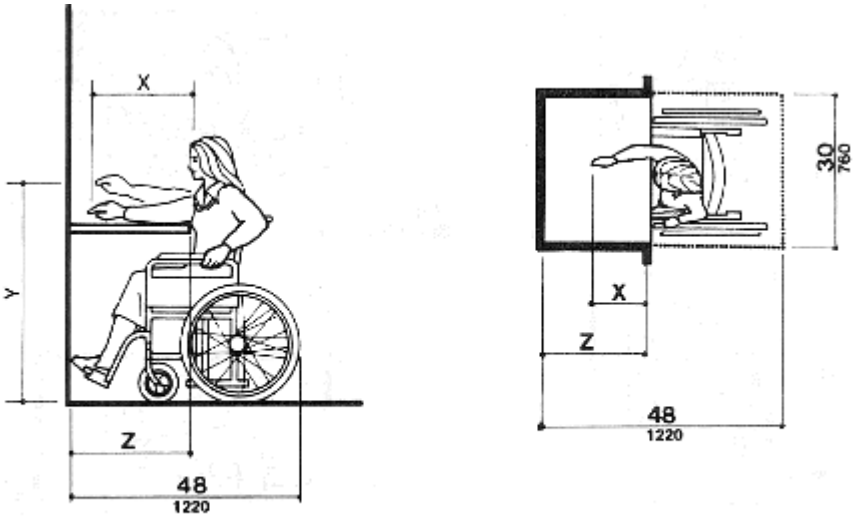


Figure 5a

High Forward Reach Limit

Forward reach range shown in profile and plan view to be 48 inches maximum and 15 inches minimum.



NOTE: x shall be ⩽ 25 in (635 mm); z shall be ⩾ x. When x < 20 in (510 mm), then y shall be 48 in (1220 mm) maximum. When x is 20 to 25 in (510 to 635 mm), then y shall be 44 in (1120 mm) maximum.

Figure 5b

Maximum Forward Reach over an Obstruction

The maximum level forward reach over an obstruction with knee space below is 25 inches (635 mm). When the obstruction is less than 20 inches (510 mm) deep, the maximum high forward reach is 48 inches (1220 mm). When the obstruction projects 20 to 25 inches (510 mm to 635 mm), the maximum high forward reach is 44 inches (1120 mm). (4.2.5, 4.25.3).

4.2.6* Side Reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 in (1370 mm) and the low side reach shall be no less than 9 in (230 mm) above the floor (Fig. 6(a) and (b)). If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig 6(c). Appendix Note

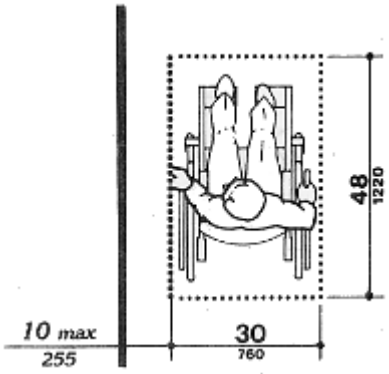


Figure 6(a)

Clear Floor Space - Parallel Approach

The 30 by 48 inch clear floor space is located a maximum 10 inches (255 mm) from the wall.

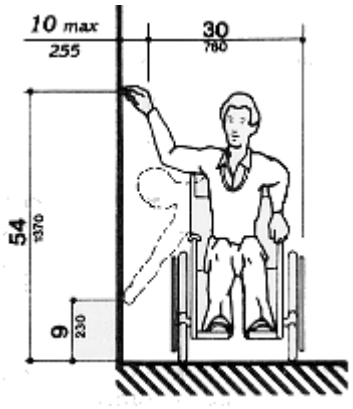


Figure 6(b)

High and Low - Side Reach Limits

The 30 by 48 inch wheelchair clear floor space is located a maximum 10 inches (255 mm) from the wall.

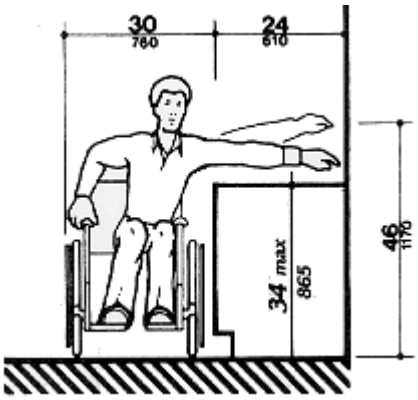


Figure 6(c)

Maximum Side Reach over Obstruction

If the depth of the obstruction is 24 inches (610 mm) and the maximum height of the obstruction is 34 inches (865 mm), the maximum high side reach over the obstruction is 46 inches (1170).

4.13.9* Door Hardware. Handles, pulls, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and

U-shaped handles are acceptable designs. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides. Hardware required for accessible door passage shall be mounted no higher than 48 in (1220 mm) above finished floor. Appendix Note; The "U" shaped handle requires no grasping, pinching or twisting of the wrist.

ABAAS 309.4 Operable Part shall be operable with one hand and shall not require tight pinching, grasping or twisting of the wrist. The force required to activate operable parts shall be 5 pounds maximum.

FSORAG: 6.2.5 Controls and Operating Mechanisms. Controls and operating mechanisms shall comply with 308 and 309.4 of the Architectural Barriers Act Accessibility Standards.

> **Exception.** The requirements of 309.4 of the Architectural Barriers Act Accessibility Standards do not apply to hinged lids and controls designed for large animal exclusion, until containers complying with the provisions for operating controls while preventing large animal access are readily available.

Program Disclaimer

1. The IGBC, USFS, LWWF, FWP and the GWDC are not responsible for damage to products that are submitted for testing and are not responsible for negative testing outcomes.
2. Manufacturers and vendors concerned about confidentiality of new product designs should alert testing personnel. Testing personnel will make every effort to ensure confidentiality of product information. Manufacturers should be aware that the IGBC, USFS, LWWF, FWP and the GWDC are not responsible for breach of such information.
3. Manufacturers and vendors should be aware that the IGBC, USFS and FWP are required to release information related to product testing and results of product tests to the public when requested under the Freedom of Information Act. This does not apply to proprietary information related to product designs or patents.
4. Program administrators reserve the right to review and modify this protocol as needed or to refuse to test certain product

Additional Resources

- ***Living with Predators Resource Guides*** – Living with Wildlife Foundation. 2003. First Edition. 2005. Second Edition. (LWWF, P.O. Box 1152, Swan Valley, MT 59826. Phone: 406- 754-0010).
- Interagency Grizzly Bear Committee web site at http://www.fs.fed.us/r1/wildlife/igbc
- LWWF web site at http://www.lwwf.org
- Grizzly & Wolf Discovery Center web site at www.grizzlydiscoveryctr.com.
- USDA Forest Service, **Bear Resistant Containers – Minimum Design and Structural Standards: Inspection and Testing Methodology – 1989**, Interagency Grizzly Bear Committee.
- USDA Forest Service, **Living with Grizzly Bears – Structures that Work, 1991**, Northern Region, WWFRP, P.O. Box 7669, Missoula, MT 59807.
- USDA Forest Service, **Low Impact Food Hoists**, Publication No. 9523-2809, Nov. 1994, Missoula Technology Development Center, Building 1 Fort Missoula, Missoula, MT. 59804. 406-329-3935.
- USDA Forest Service, **Bear-Proof Food Lockers**, Second Edition, Publication No. 9723-1811, September 1997, San Dimas Technology Development Center, San Dimas, CA 91773 (Attn: Publication Distribution, 444 East Bonita Avenue, 1-909-599-1267 ext. 201).
- USDA Forest Service, Recreation Tech Tips, **Modifying Military Medical Boxes for Bear-Resistant Containers**, April 1996, Missoula Technology Development Center, Building 1 Fort Missoula, Missoula, MT 59801, 406-329-3935.
- USDA Forest Service, **Animal Resistant Garbage Containers**, Publication No. 9523-1205. San Dimas Technology and Development Center, San Dimas, CA 91773-3198 (Attn: Publication Distribution, 444 East Bonita Avenue, 1-909-599-1267 ext. 201).
- USDA Forest Service, Recreation Tech Tips, **Electric Fence Systems: Requirements for Meeting the NCDE Food Storage Special Order**, March 1999. Missoula Technology Development Center, Building 1 Fort Missoula, Missoula, MT 59804.
- USDA Forest Service, Recreation Tech Tips, **Specifications for Portable Electric Fence Systems as Potential Alternative Methods for Food Storage**. Publication No. 0723-2305-MTDC, March 2007. Missoula Technology Development Center, 5785 Hwy. 10 West Missoula, MT 59808, 406-329-3921.

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