

## UNIVERSAL PRODUCT CHARACTERISTICS

The *Universal Design Product Characteristics* below lists features to consider when selecting home architectural products, appliances and fixtures. Our goal is to promote the selection and use of products that are well designed, attractive, and have easy-to-us features that result in a convenient, comfortable and safe home environment for people of all ages and abilities. Some features may work well for some needs but may be a problem for others. *For example*, smooth stovetops help many with hand or arm limitations cook more easily and safely by allowing for the sliding of pots on and off the heat element. However, smooth tops may provide insufficient visual cueing for those with vision problems. Few products will have all the features listed. Use this list to select features that best meet individual needs.

Controls	Display/Labels	Other Features
<b>Microwave Oven</b>		
<ul style="list-style-type: none"> <li>*Raised, cupped or otherwise detectable by touch</li> <li>*Easily programmable settings</li> <li>*Can be used with low effort and with minimum finger use</li> <li>*Minimal programming required</li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i></li> <li>*1/4" or larger lettering</li> <li>*Redundant signals, visual and audible alarms</li> </ul>	<ul style="list-style-type: none"> <li>*Microwave/convection combination</li> <li>*No lip at front edge</li> <li>*Lighted interior</li> </ul>
<b>Ranges</b>		
<ul style="list-style-type: none"> <li>*Front or side mounted</li> <li>*Raised, cupped or otherwise detectable by touch</li> <li>*Can be used with low effort and with minimum finger use</li> <li>*Clear relationship to function (<i>how it works and what it operates</i>)</li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i></li> <li>*1/4" or larger lettering</li> <li>*Redundant signals, visual and audible alarms</li> </ul>	<ul style="list-style-type: none"> <li>*Off set burners</li> <li>*Smooth cook top</li> <li>*"Cool" cook top burners</li> <li>*Automatic shut off function</li> </ul>
<b>Stovetops</b>		
<ul style="list-style-type: none"> <li>*Front or side mounted</li> <li>*Raised, cupped or otherwise detectable by touch</li> <li>*Can be used with low effort and with minimum finger use</li> <li>*Clear relationship to function <i>how it works and what it operates</i></li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i></li> <li>*1/4" or larger lettering</li> <li>*Color contrast with counter</li> <li>*Redundant signals, visual and audible alarms</li> </ul>	<ul style="list-style-type: none"> <li>*Off-set burners</li> <li>*Smooth cook top</li> <li>*"Cool" cook top burners</li> </ul>
<b>Wall Ovens</b>		
<ul style="list-style-type: none"> <li>*Can be used with low effort and with minimum finger use</li> <li>*Clear relationship to function <i>how it works and what it operates</i></li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i></li> <li>*Large size lettering <i>1/4" high</i></li> <li>*Redundant signals, visual</li> </ul>	<ul style="list-style-type: none"> <li>*Side hinged door</li> <li>*Mount so one rack is level with adjacent counter</li> </ul>

	and audible alarms	
<b>Refrigerator</b>		
<ul style="list-style-type: none"> <li>*Handles that can be used with low effort and with minimum finger use</li> <li>*Full height handles</li> <li>*Reachable interior controls</li> </ul>	<ul style="list-style-type: none"> <li>*1/4" or larger lettering</li> <li>*High contrast graphics <i>white on black</i></li> <li>*Interior lights place to illuminate objects from the front</li> </ul>	<ul style="list-style-type: none"> <li>*Easy adjustable shelves</li> <li>*Side-by-side or freezer-under style</li> <li>*Pull out shelves or adjustable shelves</li> <li>*180° Opening doors</li> <li>*Under counter drawer type units</li> <li>*Beverage dispenser</li> </ul>
<b>Dishwasher</b>		
<ul style="list-style-type: none"> <li>*Raised, cupped or otherwise detectable by touch</li> <li>*Can be used with low effort and with minimum finger use</li> <li>*Minimal programming required</li> <li>*Clear relationship to function (<i>how it works and what it operates</i>)</li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i></li> <li>*1/4" or larger lettering</li> <li>*Redundant signals, visual &amp; audible alarms</li> </ul>	<ul style="list-style-type: none"> <li>*Under counter drawer type unit</li> <li>*Height adjustable racks</li> <li>*Raised 6" or more for easy access</li> </ul>
<b>Clothes Washer</b>		
<ul style="list-style-type: none"> <li>*Front mounted controls</li> <li>*Raised, cupped or otherwise detectable by touch</li> <li>*Can be used with low effort and with minimum finger use</li> <li>*Clear relationship to function (<i>how it works and what it operates</i>)</li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i>*1/4" or larger lettering</li> <li>*Redundant signals, visual &amp; audible alarms</li> <li>*Interior lights</li> </ul>	<ul style="list-style-type: none"> <li>*Smaller sizes can be easier to reach into</li> <li>*Front loading</li> <li>*Minimal programming</li> <li>*Side hinged</li> <li>*Front detergent loading</li> <li>*Raised 6" or more for easy access</li> </ul>
<b>Clothes Dryer</b>		
<ul style="list-style-type: none"> <li>*Front mounted controls</li> <li>*Raised, cupped or otherwise detectable by touch</li> <li>*Can be used with low effort and with minimum finger use</li> </ul>	<ul style="list-style-type: none"> <li>*High contrast graphics <i>white on black</i> *1/4' or larger lettering</li> <li>*Redundant signals, visual &amp; audible alarms</li> <li>*Interior lights</li> </ul>	<ul style="list-style-type: none"> <li>*Easy to understand instructions</li> <li>*Smaller sizes can be easier to reach into</li> <li>*Side hinged</li> <li>*Front lint screen</li> <li>*Raised 6" or more for easy access</li> </ul>
<b>Kitchen Cabinets (base cabinets)</b>		
<ul style="list-style-type: none"> <li>*Loop handles or touch latch hardware</li> <li>*Smooth operating, full extension slides on drawers and pull-out shelving</li> </ul>	<ul style="list-style-type: none"> <li>*Interior lights</li> <li>*Intermittent glass doors</li> </ul>	<ul style="list-style-type: none"> <li>*Pull-out shelves/pantry</li> <li>*Pull-out cutting boards</li> <li>*Lazy Susan in corners</li> <li>*9" toe space option</li> <li>*Base cabinet heights from 27 1/2" to 40 1/2"</li> </ul>

		<ul style="list-style-type: none"> <li>*Formaldehyde-free construction</li> <li>*Open storage racks</li> </ul>
<b><i>Kitchen Cabinets (upper cabinets)</i></b>		
<ul style="list-style-type: none"> <li>*Loop handle or touch hardware</li> </ul>	<ul style="list-style-type: none"> <li>*Glass doors on wall cabinets</li> <li>*Interior lights</li> </ul>	<ul style="list-style-type: none"> <li>*Formaldehyde-free construction</li> <li>*Pull down shelving or adjustable height installation</li> <li>*Open storage racks</li> </ul>
<b><i>Kitchen Sinks</i></b>		
<ul style="list-style-type: none"> <li>*See "faucets"</li> </ul>	<ul style="list-style-type: none"> <li>*Color contrast with counter</li> </ul>	<ul style="list-style-type: none"> <li>*Shallow 6 1/2" - 7 1/2" sink</li> <li>*Rear mounted drain</li> <li>*Disposal or two-basin sink</li> </ul>
<b><i>Bathroom Sinks</i></b>		
<ul style="list-style-type: none"> <li>*See "faucets"</li> </ul>	<ul style="list-style-type: none"> <li>*Color contrast with counter</li> </ul>	<ul style="list-style-type: none"> <li>*Shallow 6 1/2" - 7 1/2"</li> <li>*Rear mounted drain</li> </ul>
<b><i>Faucets</i></b>		
<ul style="list-style-type: none"> <li>*Single levers, crosses or loops</li> <li>*Non-slip textures</li> <li>*Easy to control flow rate</li> <li>*Easy to adjust temperature</li> <li>*Peddle operated option</li> <li>*Motion sensing activation</li> <li>*Side mounted</li> </ul>	<ul style="list-style-type: none"> <li>*Easy to distinguish hot from cold with letters and color</li> <li>*Color contrasting handles</li> </ul>	<ul style="list-style-type: none"> <li>*Built-in spray or pull out spray</li> </ul>
<b><i>Grab Bars</i></b>		
<ul style="list-style-type: none"> <li>*Non-slip surface</li> <li>*Comfortable diameter for user</li> </ul>	<ul style="list-style-type: none"> <li>*Color contrast with wall</li> </ul>	<ul style="list-style-type: none"> <li>*1 1/4" - 1 1/2" diameter</li> <li>*Available in many colors</li> <li>*Maximum 1 1/2" gap between wall and bar</li> </ul>
<b><i>Toilets</i></b>		
<ul style="list-style-type: none"> <li>*Can be used with low effort and with minimum finger use</li> <li>*Flush control on open side</li> <li>*Motion sensing auto flush</li> </ul>	<p>NA</p>	<ul style="list-style-type: none"> <li>*14" - 19" seat height option</li> <li>*Elongated bowl</li> <li>*Bidet features</li> <li>*18" to center of bowl from side-wall</li> </ul>
<b><i>Shower/Tub Mix Valves</i></b>		
<ul style="list-style-type: none"> <li>*Adjustable temperature levels</li> <li>*Easy to use lever handle</li> <li>*Hand held shower with pause button on hand unit</li> <li>*Off set control mounting</li> </ul>	<ul style="list-style-type: none"> <li>*Easy to distinguish hot from cold with letters and color</li> <li>*Temperature display</li> </ul>	<ul style="list-style-type: none"> <li>*Anti-Scald features</li> <li>*Pressure balanced</li> <li>*Pre-set temperature settings</li> <li>*69" minimum hand shower hose length</li> </ul>

<b>Home Automation</b>		
*Easy to set relationship between transmitter and receiver *Limited number of buttons	*High contrast graphics <i>white on</i> *1/4" or larger lettering *Redundant signals, visual and audible alarms	*Remote sensing *Computer, TV or phone access *Voice activation
<b>Closet</b>		
*Lighted rocker switch outside of door or door activated switch *Loop or lever handles *Fold back door hinge hardware	*Interior lights mounted to illuminate contents from behind user	*Lighted closet interior *Closet rod mounted at two heights or *Adjustable closet shelving/rod system *Recessed floor track *Walk in capability
<b>Door Handles</b>		
*Lever at least 5" long	NA	*Smooth edges *Lever handle turns back to door
<b>Windows</b>		
*Can be opened with one hand, closed fist	*Hardware color contrasting with casement	*Can be fitted with power opener *Casement/awning type *Locks and cranks no higher than 44"
<b>Door Locket</b>		
*Large deadbolt handle *Easy to turn *Mortise style <i>integral latch and lock</i> *Lever handle	*Easy to see, night lit *“Locked” indicator	*Remote control operation
<b>Light Switches</b>		
*Rocker panel or touch controls allow low-effort use *Mounted between 44" to 48"	*Color contrast with wall	*Glow-in-the-dark or lighted for night use *Motion detecting features increase safety
<b>Lifts or Elevators</b>		
*Controls on both sides of cab *Controls no higher than 44" *Can be used with low effort and with minimum finger use *Raised, cupped or otherwise detectable by touch	*High contrast lettering *Redundant signals - visual and audible cues *Raised or Braille lettering	*At least 32" X 48" interior floor space *Automatic opening doors *Backup power source *Emergency phone system

**Courtesy:**

[http://www.design.ncsu.edu:8120/cud/projserv\\_ps/projects/psproductchar.htm](http://www.design.ncsu.edu:8120/cud/projserv_ps/projects/psproductchar.htm)

