

2.009 Product Contract

ORANGE

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Product description: Shower chair to assist seated users.

Intended customer: People who can neither use a standard upright shower and for whom the hand held shower is not sufficient.

Market: Efficient shower assistant devices.

Need	Attribute	Specification
Wash entire body easily and effectively	Water source pointed at/able to reach the buttocks area	A water source located under the seat positioned 2" from rear at an upward angle necessary (according to the Public Utility Municipal Sanitary Potable Drinking Water Supply System standards) -LMH & CG, ARS OR A mobile water source that can reach 1 foot above and below seat height -EMP
	Water source above head able to reach hair/head and back	A height adjustable (from 3.5 to 5 feet) stationary shower head above and behind the user -EMP
	Water source able to reach front and legs	A mobile shower head that can reach 3 feet above and below seat level -EMP
	Water flow strong enough to do some/most of the cleaning	Water pressure at 50 psi for comfortable, effective washing -EMP
Hands-free showering	Adjustable water source that can retain its desired position	Telescoping pole that can be locked into place - EMP
	Adjustable without requiring user to reach up above head	Controls within 1 foot of waist level - EMP

Efficient showering	Adjustments should be able to be quickly made	If electrically moving shower head, speed 3"/sec -EMP If not, takes user <=1 second to reach both shoulders, <=2 seconds to go from torso to legs -THL
Customer Friendly	Safe to users, intuitive use Comfortable seat	Logical controls and adjustments -ET Waterproof cushion, curved ergonomic seat -EMP
Compatible with non-handicapped users	Can be easily removed by a non-handicapped user or folded to the side, safely out of the way Must be able to go easily from one mode to the other. Must be very easily adjustable from non-handicapped mode to sitting mode.	Product weight under 15 lbs -ARS Smaller than bathroom door, foldable -JH Adjustable from wheelchair height, requires at most 15 N of force to adjust -THL
Compatible with current bathroom	Fits in smallest of standard bathtubs/showers	Seat width no wider than 20", seat depth 18", seat height 15" -EMP
Prevent further injuries	Solid and stable design that doesn't slide Can be used as a support	Rubber non-slip feet -JH No sharp edges, exposed pinch points -JH Bolted/secured in a way that will resist 100 lbs of sideways force. -THL Arm rests 6" above seat for support/falling prevention -EMP
Strong enough for any user	Sturdy design	Support minimum user weight of 250 lbs -EMP

<p>Prevents disease carrying agents from growing/spreading</p>	<p>Easy to clean, anti-bacterial surfaces</p> <p>Minimizes/eliminates backwash into water source</p>	<p>Use draft angles, design to dry quickly. -JH</p> <p>Aim the water at an angle less than 30 degrees to prevent bacteria from bouncing back on nozzle – EMP</p>
<p>Robust</p>	<p>Individual parts easy to replace (shower heads, hoses) or repair</p>	<p>Use common plumbing and fasteners. –JH</p>