

## Appendix G: Design Freeze

### Design Concept

Our two-sided arch ramp is going to be made to go over all Misericordia ramps because of its unique detachable pieces. There will be two separate ramps made out of polycarbonate sheets with high tensile strength to withstand at least one resident in wheel/shower chair and a caregiver. One ramp will be smaller to fit inside the shower (24" x 12"), and the other will be larger (24" x 22") , but still not too long to block the area around the shower (cannot exceed 30"). The connecting piece will be made out of acrylic, with rubber pieces to keep the ramps from slipping around. Also rubber pieces will adhere beneath the polycarbonate sheets inside and outside of the shower so that they will stay in place. Each ramp will have non-slip decals on them (preferred by Misericordia), and metal ramp attachments on the bottom so that the transition from floor to ramp is as smooth as possible.

### Bill of Materials

Item	Qty.	Source	Part #	Unit Cost	Total Cost
Medium Density Fiberboard (3/4" 2'x4')	2	Home Depot	099167223032	\$29.39	\$59.98
Flex Seal Liquid (1 qt)	1	Home Depot	853517006290	\$34.98	\$32.98
High Temperature Foam Rubber Seal Flange - Mount, 3/4", Overall Width, Black, 5 ft Length	1	McMaster - Carr	914K119	\$24.70	\$35.09
Rubber Sheet	1	Segal DSg Center	n/a	n/a	\$0.00
Grip Tape	1	Segal Design Center	n/a	n/a	\$0.00

Item	Qty.	Source	Part #	Unit Cost	Total Cost
Total (with tax)					\$138.68

### Sketches

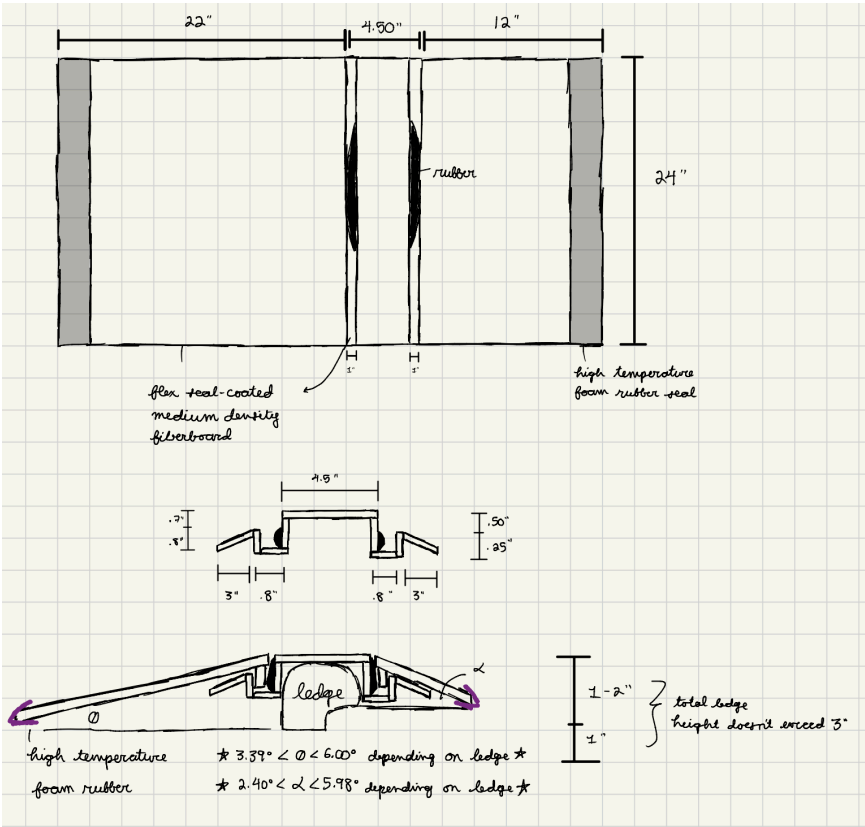


Figure 1: Top, Front, and Side View of SafePlash

### 3D Model

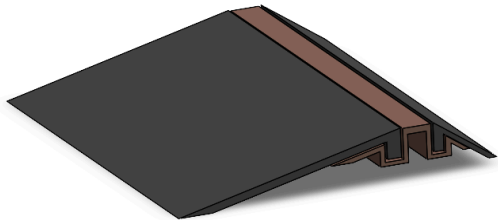


Figure 2: Side view of SafeSplash with a focus on the outer ramp

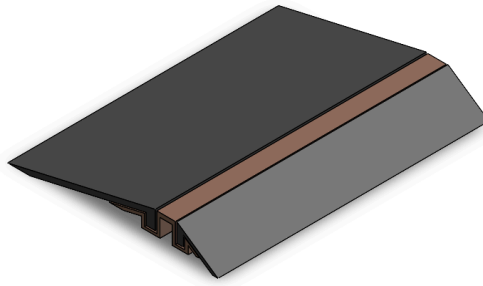


Figure 3: Side view of SafeSplash with a focus on the inner ramp



Figure 4: Front view of SafeSplash without the ledge

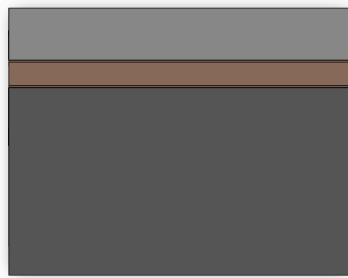


Figure 4: Top view of SafeSplash