

A. **Sheldon ARS-4030 Augmented Reality Sandbox:**
42"W x 32"D x 85"H (Depth is 46" when shelf is up).

1. This sandbox uses 3D visualization applications and a hands-on exhibit combining a real sandbox, virtual topography and water created using a closed loop of a Microsoft Kinect 3D camera, powerful simulation, and a Linux computer and data projector. The resulting AR Sandbox allows users to create topography models by shaping real sand, which is then augmented in real time by an elevation color map, topographic contour lines, and simulated water and lava.
2. Assembly provided complete with the sandbox, camera, projector, laptop and wire management, including instructions for downloading and calibrating the visualization software and running the program.
 - a. Note: Sand is not included. 250 lbs. of Sandastic sparkling white play sand is recommended.
3. Sandbox is oak plywood, mounted on a solid oak table frame, and moves on heavy-duty locking casters. A wire management system keeps the cords from interfering with the box. A 14"x17" oak shelf is provided to hold the laptop while in use, which folds away with a collapsible hinge.
4. The box assembly is 42"W x 32"D x 10"H. with 1" thick doweled plywood panels edge banded on exposed edges, and a 1" thick plywood bottom panel grooved into front, back, and side panels. Box is mounted on a table frame. Box and table frame with casters approximately 35" high.
5. The table frame has radius edged apron rails made of 13/16" x 4-1/2" solid oak. Each apron rail is securely attached with four (4) screws to heavy-duty, steel corner braces. Interior face of aprons are provided with pocket holes for screwing frame to underside of box. Each 2-1/4" x 2-1/4" solid oak leg is attached to steel corner plates with hanger bolt, lock washer, and hex nut. Legs are reinforced with two (2) 3/4" x 2-1/2" oak braces and a center stretcher rail, all attached on each end with two (2) confirmats. Table frame legs mounted on 4" lock stem casters.
6. The unit is provided with a T-slotted aluminum extrusion kit consisting of two (2) assemblies for support of the camera, projector, wire management, and fold-down laptop shelf that is mounted to rear of the sand box and table frame with a combination of L-brackets with confirmat screws and connecting nuts, and L-brackets with cap screws and T-nuts.
 - a. 2" x 4" x 48" heavy-duty vertical aluminum extrusion main upright support assembly mounted to rear of sandbox and table frame.
 - b. 1" x 2" aluminum extrusion assembly that is attached to main upright support assembly to accommodate projector mount, camera mount, wire management, and laptop shelf mount.