One of the largest hindrances to effective salvage work is a lack of staffing. As stated earlier, salvage operations are most effective if initiated during fire attack. If there is not a unit available on scene to begin salvage operations, then unnecessary damage will occur. Our job is to provide the best customer service possible, even if the situation is not ideal.

— In multistory buildings, salvage is normally started on the floor below the fire floor. On single story units, efforts should be made to protect the items most at risk of damage first.

— Valuables should be placed in drawers. Highly valuable items should be given to an officer for proper disposition. No matter the intent, firefighters should never place valuables in their pockets!

— Records are vital to businesses, and a large number of businesses that lose their records in fires never reopen. File cabinets and computers are key areas for salvage operations in businesses as well as homes.

Note: The following techniques are effective; however, creativity and common sense are encouraged as these evolutions are applied to actual incidents.

**Methods Of Folding And Spreading Salvage Covers**

**Palo Alto Accordion Fold**

1. Place the cover on a clean surface (working side up).
2. Turn all corners in about 10" to 12".
3. Two firefighters take position opposite each other at each end of the cover.
4. Place outside hand flat on the end of the cover about 3 feet in; with the inside hand, reach over and grasp the corner of the cover and lap it over.

5.
Place outside hand flat on the end of the cover about 18 inches in; with the inside hand, reach over and grasp the corner of the cover, then bring it over to the edge of the seam.

6. Go to the opposite side of the cover and repeat steps 5 and 6. This will bring both sides of the cover to the center fold.

7. Use a push broom to remove air and wrinkles from the cover before further folding.

8. With firefighters opposite each other at one end of the cover, place outside hand flat on cover, with thumb underneath, 6’ to 8” from the end. Place inside hand under cover, with palm up and thumb on top, 6” to 8” from your opposite hand.
Salvage Operations

9. Bring inside hand over outside hand; bring even with the edge of the cover.

10. Third firefighter places hands in the center of the cover to keep the cover from wrinkling in the folds.

11. Keep thumb under the cover on outside to keep the folds even.

12. Repeat operations until the cover is folded.

One-Person Throw

1. Place the center of the salvage cover over either forearm, pleat towards your body; grasp the bottom fold with the fingers of that hand.

2. Reach in next to your body with your other hand and grasp the three top folds between your thumb and fingers, thumb down. Grasping the three top folds ext to your body in this manner will give leverage and weight to the throw.

3. Swing your arm back up and over your shoulder, with the three folds falling over the back of your hand.

4. Throw the cover over the material to be covered by bringing your hand forward and keeping your arm stiff while throwing. The cover should be thrown in an arch. The forearm of the arm holding the balance of the cover must be raised during the throw to clear high piles. The fingers of that hand may be used as a brake while the cover is paying out to keep from unfolding the cover too soon.

5. With another firefighter at the opposite end, balloon out the sides of the salvage cover.
Salvage Operations

6. Tuck the cover in at the bottom. This is called "bagging."

Two-Person Counter Pay-Off

1. One firefighter holds the cover over both forearms, with the pleat towards the body, grasping the bottom folds with the fingers of both hands.

2. The other firefighter grasps the top folds with both hands and walks backward until the length of the cover is reached. The cover must not touch the floor. Figure 7

3. Both firefighters raise the cover over the counter or other material and gently lower the center fold of the cover to the center of the counter.

4. Both firefighters open up the cover and drape it over the sides of the counter.
Salvage Operations

5. Both firefighters grasp the bottom edge of the cover and bag the cover to the bottom of the counter. Repeat bagging on the other side(s). The cover must be kept clear of any aisles.

Removal of Salvage Cover from Counters

1. Clear the cover ends and sides.

2. Fold the sides over to the opposite side of the counter.

3. Two firefighters take positions opposite each other at the same end of the counter.

4. Each firefighter grasps the end of the cover and raises it clear of the counter.

5. Both firefighters walk to the other end of the cover, carrying the cover at arm height, until the cover starts to drag.

6. Both firefighters repeat step 5 from the other end of the cover, overlapping the ends approx. 12".

7. Repeat steps 5 and 6 until the cover is approximately 8" wide.

8. One firefighter places a portion of the folded cover over one shoulder, turning away from the counter at the same time.

9. The firefighter on the other side of the counter grasps the folds, raising the cover clear of the counter, and drapes the folds on the other firefighter's opposite shoulder.

10. The firefighter carries the cover to a place suitable for dumping the debris and refolding the cover.
Removal-to-Quarters Fold

1. One firefighter at each end grasps the center of the cover.

2. Raise the cover so that the edges are off the ground. Shake the cover from side to side to remove the debris. The cover is folded in half at this point.

3. After shaking the cover several times, place the cover on the ground in a clean location. Fold from the closed edge to the open edge.

4. Fold one end of the cover approximately 2 feet from the opposite end. Fold the cover loosely from the closed end to the open end and place the cover on the apparatus.
Leak-proof Folds and Water Chutes

Leak-proof folds are used to join two covers together. Water chutes are used primarily to catch water and channel it to another location. In most instances, the water is run-off from firefighting efforts or from a broken sprinkler head. Usually, the water is channeled outside of a structure or to a drain.

**Leak-proof Fold**

1. Two firefighters spread the first cover, working side up.

2. Turn the cover edge back 2 to 3 feet on the side where the other cover is to be used.

3. Spread the second cover, working side up, depending on the application.

4. Bring the seams of the first and second covers together by pulling the second cover in place.

5. Firefighters take positions on the first cover, facing the second cover.

6. Grasp the edges of both covers, fold them over 3” to 4”, then roll them until the slack is taken up. When used for a water channel or a chute, the roll must be made in the direction of water travel to reduce the chances of the leak-proof fold unraveling.
Water Chute with Pike Poles and Salvage Cover

1. Spread the salvage cover out, working side down. Place a 12' pike pole on each long side of the cover, approximately 4” in from the edge. A chute can also be made by placing the poles on the short sides of the cover.
Salvage Operations

2. Insert the point of the hook into the top grommet and fold the end of the cover down through to clear the hook.

3. Lap the cover over the poles. Expose at least 6” of the pike pole for a handle. If necessary, turn the cover up to obtain the desired length.

4. Roll the pike poles and the cover towards the middle, an equal distance apart, until the desired width is reached.

5. Turn the chute over so the working side of the cover is up. Place the chute into position. Fasten the upper end of the chute by placing the pike pole hooks over ladder rungs, high furniture, pipes, or by using "S" hooks, nails and a cord.

6. The chute may be directed out of a window, door or pre-drilled hole placed in the floor by the firefighters. The chute also may be directed into a sink, bathtub, or toilet bowl. Figure 15

Stairway Drain

1. Determine the length of the stairway needing protection. Select the number of covers needed to cover the area.

2. Lay out the covers, working sides down, and make a leak-proof fold between each cover. Drains made with multiple covers may be overlapped two to three feet instead of using the leak-proof fold, but the overlap must not occur on a landing.

3. After making the leak-proof folds, roll the sides of the covers an equal distance towards the middle until they are approximately half the width of the stairway.

4. Turn the cover over so that the working sides are facing up.

5. Carry the covers to the stairway. This will require one firefighter for each leak proof fold and one firefighter
Salvage Operations 801.00

Each for the ends of the drain. Place the covers in position. Figure 17

6. Spread the upstairs end of the cover so it will catch water falling through to the stairway.

7. Place traffic cones, or other objects, to "bank" the drain at landings of the stairway. This will prevent the water (due to momentum) from spilling over the rolled edges.

Catch-All and Catch Basin

Catch Alls and Catch Basins are primarily used to contain water or debris. Catch-Alls for Debris are most often utilized to cover a floor and collect any debris that may fall. Catch Basins are most often utilized to contain water that is leaking through a ceiling onto a floor below. These are effective tools, especially when coupled with the WAP water vacuum. A three-sided Catch-All is often used during chimney fire evolutions.

Catch Basin Using Salvage Covers

A Catch Basin is used to capture water dripping or draining from one spot or area. An example of where a Catch Basin would be an option is water leaking from a ceiling light hole from an upper floor. Eventually the water will need to be

1. Place materials, such as chairs, couches, benches, foot stools, etc., in position forming a circle or square.

2. Secure items in position by tying them together with a rope, rope hose tool, or cord.

3. Place salvage covers over the assembled material, allowing the center to bag inside. Do not leave a hollow space beneath the cover on the inside. Allow the cover to drape over the outside of the objects. Tuck under the outside edge and secure the cover.
Salvage Operations
Catch-All for Debris

1. Spread the cover.

2. Firefighters on one end of the cover roll the edge in 12" to 18", or as the size of the catch-all dictates.

3. Firefighters repeat step 2 on the other end of the cover.

4. Firefighters repeat step 2 on one side of the cover and make envelope folds in the corners.

5. Firefighters repeat step 4 on the other side of the cover.

Improvised Sump

1. Select a location for the sump. Consider whether the sump will be used for water supply, hazardous material cleanup, etc.

2. Form ladders from the engine or truck into a triangle and secure them together with rope or hose tool. If using the ladders from an engine, the 24' extension ladder will need to be separated. To separate the ladder, remove the fly section from the bottom of the bed section. The halyard will need to be removed. Sometimes one or both of the stops will also need to be removed. You need to know the equipment on your assigned apparatus. Figure 22
3. Using two salvage covers, working side up, make a leak-proof fold.

4. Place the salvage covers over the ladders, allowing the center of the covers to sag inside. Make certain the covers are touching the ground. Allow the covers to drape over the ladders and tuck the outside edges under the frame. Figure 23

**Plastic Sheeting**

Plastic sheeting is actually preferred instead of salvage covers for protecting items from water damage. Obviously, it should not be used if it is likely to contact hot objects. The roll can be taken on the dispenser to the area that salvage operations are being performed. The amount of sheeting needed to protect the items can be cut to the size needed. The items are covered using the same basic techniques as a salvage cover. The roll can also be used like the two-person counter pay-off. The plastic sheeting is disposable, so it can be left in place until the building occupants want to remove it (if we have not done so already).