## **Ice Fusing**

There are 3 basic methods of fusing 2 pieces of ice together. No matter which method you select, You will need to know the 3 key factors-

## A 3 Key factors-

1. Cold Ice

One piece of ice should be no more than 25 degrees. The temperature of the other piece is not as important.

2. Water

Either created by the fusion process (Aluminum) or added with a syringe. Using cold water will increase the speed of the fusion

3. Two flat surfaces

The flat surfaces can be prepared with Aluminum, Nailboard, or Handsaw

**B Aluminum Method**- This method produces a nearly invisible seam

& can be used vertically. This method will break down in direct sunlight.

1. Heat aluminum with a household iron (set on low).

Select a piece of aluminum slightly larger than the size of the seam.

2. Flatten the areas to be joined on a warm piece of aluminum.

(one of these pieces of ice should be 15-25 degrees F)

- 3. Press the flattened surfaces together.
- 4. Pour ice water around the perimeter of the seam.

C *Nail Board Method* - This method allows you to join larger pieces of ice & will not break down in direct sunlight. This method is difficult to use on small surfaces & vertical seams.

1. Using the nail board, flatten the surfaces you intend to bond.

One of the pieces should be 25 degrees or colder.

Use the nail board in a circular motion.

2. Place the flattened surfaces on top of each other.

A screwdriver makes a good spacer.

3. Squirt water into the seam.

Quickly remove screwdriver & Wait 10 - 15 minutes.

**D** <u>Hand Saw Method</u>- Handsaws are lightweight and travel easily. This method allows you to join larger pieces of ice & will not break down in direct sunlight. The hand saw method is difficult to use on vertical seams.

1. Place one piece of ice on top of another.

One of the pieces should be 25 degrees or colder.

2. Run the Hand saw between the 2 pieces

Repeat until the top piece does not wobble back and forth and you cannot see any gaps between the two.

3. Pour ice water over the top block.

Watch for it to run into the seam.

Mix snow and water for any unfilled areas. & Wait 10 - 15 minutes.