

Snow Casting

Maine State Police Crime Laboratory – Latent Print Section

Supplies:

- Dental stone or Snow Print Plaster
- Gallon of water
- Heavy duty baggie
- Photo equipment
- Large spoon or trowel
- Snow Print Wax
- Casting frame (if needed)
- Potassium Sulfate

Dental Stone Steps:

1. Locate, mark, and photograph your impression without, then with, contrasting.
2. Heavily coat the bottom and sides of the impression with Snow Print Wax.
 - a. Multiple cans come in handy as the nozzle tends to clog when it gets cold. Tip: You can place one can in your coat while spraying with the other can, then when that nozzle clogs, switch out the first can with the warm one in your coat.
3. Add snow to your water until it becomes slushy (goal it to get it as cold as the snow).
4. For 1 shoe/boot print: 2 Lbs. of Dental Stone + 2 tablespoons of potassium sulfate in a heavy-duty baggie.
5. Add around 12 ounces of cold water to the dental stone baggie, zip it, and knead the baggie to mix the dental stone. Keep adding water and mixing until the dental stone is the consistency of pancake batter.
6. Place the frame around your impression if it's a very shallow impression.
7. Gently pour the dental stone onto a spoon or trowel and guide the stone into the impression as you pour.
8. Always pour into the stone that's already on the impression, allowing it to run gently over the impression.
9. Fill the entire impression.
10. Place the spoon, trowel, or your fingers onto the very top of the stone and agitate to ensure the stone settles into all crevasses of the impression.
 - a. If casting a tire impression, do not use a casting frame, and repeat steps 4-10 on the next impression segment, slightly overlapping the first pour.
11. Wait until it hardens – mark your evidence.

Snow Print Plaster Steps:

1. Locate, mark, and photograph your impression without, then with, contrasting.
2. Follow the steps on the bucket.
3. Allow to harden (~10 minutes) – mark your evidence.

Final Steps for either casting method:

1. Allow either cast to dry at least 24 hours (leave exposed to air, do not put it in a box or bag)
2. Do not clean the cast.
3. Package in paper or box – protect the impression surface.

Bring to the Lab:

1. The comparison photos of your impression(s) on a thumb drive or other media device.
2. The cast(s)
3. Suspect shoes/tires