

Hand Shear Test

1. Excavate a clean vertical wall of snow at least 40 cm wide and 50 cm deep or down to old snow.

Analyse the snow profile →

2. Cut a vertical slot to the left of the front face and 35 cm or so up-slope.
3. Cut a second slot 30 cm to the right of the first slot, again 35 cm up-slope so you have isolated both sides.
4. Cut carefully across the back wall between the slots.
5. Place your hands vertically down in the slot at the back of the block to above the wrists.
6. Pull towards you parallel with the snow surface.
7. Look for shear failure.
8. Could you predict the failure?



Scale:

- | | |
|---------------------------------------|----------------------------|
| 1 fails while isolating block | very major weakness |
| 2 fails when placing hands in slot | major weakness |
| 3 fails when applying finger pressure | significant weakness |
| 4 fails with a pull | weakness present |
| 5 does not fail | stable to depth of profile |

Snow Profile Example

