

SNOW PIT PROFILE CHART

Date _____ General Area _____

Location of Pit _____

Weather & Temperature:

Any Observed Instability (slabs, cracks, whoomps, etc.):

Other Notes:

Elevation _____

Aspect _____

Slope Angle _____

STABILITY FORECAST

- 1 - Stable (Green)
- 2 - 50/50 (Yellow)
- 3 - Very Unstable (Red)

Crystal & Grain Symbols

(Note: slightly simplified from ICSI Standards)

- Newly Precipitated (Original crystals identifiable)
- Partially Rounded (Branches, irregular shapes)
- Rounded Grains
- Faceted Crystals (Sharp edges and corners, glassy smooth faces)
- Depth Hoar (Faceted, angular crystals with striations.)
- Rounding of Faceted Crystals
- Surface Hoar (Striated - sometimes needle-like)
- Melt Freeze
- Ice Masses

Free Water Symbols

- Dry Snow
- Moist - A snowball can be made but water not visible with a hand lens
- Wet - A snowball can be made easily and water can be seen between grains
- Very Wet - Water can be pressed out of the ball
- Slush - Water runs out easily

Shear Characteristics

- Q1 - Breaks clean and smooth like it's spring loaded
- Q2 - Breaks on a smooth plane but more stubborn
- Q3 - Breaks on a rough, broken plane

Compression Test (CT) (30 cm x 30cm - 1' x 1')

(10 Wrist Taps / 10 Elbow Taps / 10 Shoulder Hits)

- CTV - Fractures when isolating column (Red Flag)
- CT1-CT10 - Fractures during first 10 taps (Red Flag)
- CT11-CT20 - Fractures during elbow taps (Yellow)
- CT21-CT30 - Fractures during shoulder hits (Green)
- CTN or CTX - No Fracture (Green)

Extended Column Test (ECT) (90cm x 30cm - 3' x 1')

(10 Wrist Taps / 10 Elbow Taps / 10 Shoulder Hits)

- ECTPV - Propagation: Entire column fractures (Red!)
- ECTP# - Propagation: Entire column after # taps (Red)
- ECTN# - Part of column fractures after # taps (Green)
- ECTX - No Fracture (Green but try different shear tests)

Rutschblock Scores (RB) (2m x 1.5m - 6' x 4.5')

- RB1 - Slides during digging (Red Flag)
- RB2 - Slides with gentle step (Red Flag)
- RB3 - Slides with knee compression (Red Flag)
- RB4 - Slides with one jump (Yellow Flag)
- RB5 - Slides with two jumps (Yellow Flag)
- RB6 - Slides with repeated jumps (Green)
- RB7 - Nothing produces smooth break (Green)

Size of Grains	Free Water	Temperature	Distance Above Ground	Very Soft (Fist)	Soft (4 Fingers)	Medium (1 Finger)	Hard (Pencil)	Very Hard (Knife)

Snow Layer Temperature: _____