

Storage Igloo Steel Arch/Underpass. FAC: 4221

CATCODE: 422273

OPR: AF/A4LW

OCR: AFSC/SEW

1.1. **Description.** The steel-arch, earth-covered igloo has a concrete floor, foundations, side arches, and rear and front walls. The structures provide protection against propagating explosions between adjacent storage spaces within the common mound. The steel arch type is normally more economical to construct than the reinforced concrete igloo. This is especially true where the cost of additional land area and a connecting road net required to construct a multiple igloo complex is considered.

1.2. **Requirements Determination.** For storage of large volumes of explosives above 113,000 kg (250,000 pounds) NEW, igloos approved as standard according to DoD 6055.9-Std, are mandatory. See general guidance under CG-42 Ammo Storage Overview paragraph 1.1, 1.2, 1.3, and 1.4.

1.3. **Scope Determination.** Igloos are usually constructed based on DDESB approval as standard structures, such as AW 33-15-64 (USACE drawing), for storage of explosives. USACE drawings are available from the USACE Huntsville Division, 106 Wynn Drive, Huntsville, Alabama, 35805-1957.

1.4. **Dimensions.** Igloos may be constructed in variable lengths of 0.6 m (2 ft) increments and widths up to 9.1 m (30 ft).

1.5. **Design Considerations.** The arch is constructed of heavy gauge corrugated steel plates, and the double leaf doors are of heavy blast resistant steel. See AFMAN 91-201 for further guidance.