

**RIGID PROTECTIVE COVER
(HARD PLASTIC COVER)**

1 Rigid Protective Cover - General

- 1.1 This document outlines the use of Rigid Protective Cover at SaskPower. Rigid Protective Cover is also known as 'hard plastic cover', 'hard cover-up' or just 'hard cover'.
- 1.2 Rigid Protective Cover is **NOT** intended to be used in the same manner as tested soft rubber cover-up. It is not to be used for prolonged direct contact or as a primary barrier. It is not to be used for conductor cover-up during 4kv-34kV Rubber glove procedures.
- 1.3 It is intended for working in proximity of energized apparatus where encroachment on MAD or inadvertent contact is a possibility. See below under "Covering Energized Apparatus".
- 1.4 Rigid Protective Cover is tested as a phase to ground voltage barrier, and also acts as a visual aid in identifying energized apparatus and judging working clearances.
- 1.5 Rigid Protective Cover is designed to be fairly universal. Therefore its fit in some applications may not be ideal. There may be gaps which would allow:
 - A tie wire to touch an uncovered insulator pin that an arm guard does not quite cover (during stick work); or
 - A worker or equipment to contact an area in an opening in the cover or at a "junction" point (connection point between 2 pieces of cover).

These possibilities, as well as other contact scenarios do exist, so the user must be aware of them and consider them during every application.

- 1.6 Under no circumstances is Rigid Protective Cover intended to prevent mechanical equipment from contacting either energized or grounded apparatus therefore contact must be avoided. Mechanical equipment provides enough force to damage the Rigid Protective Cover.

2 For Temporary Use Only

- 2.1 Rigid Protective Cover is designed to be as light and easy to use as possible, therefore it is not made to withstand prolonged exposure to electrical stress. It must not be left installed for extended periods, especially if there is a possibility of rain, high humidity, blowing dust, UV exposure, etc. It is recommended to remove Rigid Protective Cover at the end of the work day, but understand there are situations where it may be preferable or necessary to be left on overnight. It must be understood that if it is being relied upon for insulation, failure is a possibility.

3 Inspection, Handling and Storage

- 3.1 **IMPORTANT - Ensure Rigid Protective Cover is rated for the voltage of the application.**
- 3.2 Each Rigid Protective Cover must be visually inspected before each use to ensure there are no cracks, deep scratches or gouges, and to ensure that it is free of contamination. Any Rigid Protective Cover found to have defects shall be removed from service and returned to Apparatus Repair.
- 3.3 Like the majority of other live line insulated tools Rigid Protective Cover must be handled with care to minimize damage including breaking, cracking and scratches.
- 3.4 It is recommended to store Rigid Protective Cover in protective bags and out of direct sunlight.
- 3.5 Cleaning should be done with a wiping cloth. Mild soap and water may be used if necessary as per manufacturer's recommendations.
- 3.6 Periodic electrical testing of Rigid Protective Cover is not required.

4 Covering Energized Apparatus

- Conductor covers
 - Insulator covers / hoods
 - Cut-out / disconnect / switch covers
 - Dead-end covers
- 4.1 Rigid Protective Cover is intended to prevent personnel and equipment from making accidental brush contact with energized Conductors, Apparatus, or Equipment. It is to be used to cover exposed energized apparatus to encroach upon MAD (**A safe Distance for the applicable voltage hazard MUST still be maintained.** See required clearances below). It is to be used as a secondary barrier only.
 - 4.2 **UNDER NO CONDITIONS shall intentional contact be made with the Rigid Protective Cover when applied to energized apparatus unless adequate primary barriers are used along with an approved work method. (ie; Rubber gloves, Insulated sticks, etc).**
 - 4.3 Personnel must always be aware of their position in order to avoid accidental contact with the installed Rigid Protective Cover.
 - 4.4 **Minimum Approach Distances must be maintained to any exposed energized electrical apparatus.**
 - 4.5 Examples of Uses
 - Setting poles
 - Changing transformers
 - Hanging Switch arms
 - Hardware tightening

5 Covering Equipment/Hardware in the Vicinity of Energized Apparatus

- Cross-arm guards
 - Pole Guards
 - Boom Covers
- 5.1 Rigid Protective Cover can also be used to cover equipment or hardware in the vicinity of energized apparatus. It will protect from accidental brush contact between hardware / equipment and any energized apparatus. **(A safe Distance for the applicable voltage hazard MUST still be maintained.** See required clearances below). It is to be used as a secondary barrier only.
- 5.2 **UNDER NO CONDITIONS shall intentional contact be made between Rigid Protective Cover on hardware or equipment and energized apparatus.**
- 5.3 **Any uncovered hardware and equipment must maintain Minimum Approach Distances from any exposed energized electrical apparatus.**
- 5.4 Examples of uses:
- Setting poles (pole guards)

6 Working Clearances

- 6.1 Minimum Approach Distances are intended working clearances for workers and equipment to exposed energized apparatus. Once rated Rigid Protective Cover is applied the energized conductor is no longer exposed, but a safe working clearance must still be maintained from the Rigid Protective Cover, as follows:
- 34kV and Below - .30m (1 ft)
 - 72kV - .61m (2 ft)