SEF900 / SEF920 Electrical / Communication Box
Installation Guide
Read all instructions before installing

**General:**

The electrical communication boxes can be installed in either natural turf or synthetic turf fields. Options for the covering include factory pre-installed synthetic turf (used on natural grass fields), or having the synthetic turf contractor cover the box (used on synthetic turf fields) in the field.

Drainage is important when installing the open bottom communication box. The box should be placed on a well-drained substrate. If it is away from the well-drained substrate, a solid concrete bottom with a drainage pipe can be used to help prevent standing water.

The divider plate (For full size two chamber boxes) separates electrical utilities from communications wiring. This plate can be removed to furnish an open mounting area if preferred.

**Placement:**

Set a concrete brick in a stiff patty of mortar under each corner of the box. The height of the box is 14”. The top of the bricks should be 15” below finished grade for natural grass fields. **In Natural Grass Field Applications** that are using the factory pre-wrapped box, the top of the box should be set at the same finished grade.

If the field is **Synthetic Infill Turf**, add the depth of the infill material to the 15” from the top of the bricks. For example, if 1½” of infill is being installed, the top of brick should be placed at 16½” below finished grade. This is important; when used on synthetic infill turf field the box must be set at the correct elevation so that the turf can be brought from the field over the edge of the box, covering the aluminum edges of the communication box.

Position the box on the corner bricks and then level the box with the adjuster bolts located in each corner to even the rim of the box to the correct elevation.

**Concrete:**

Place mortar around the outside and inside corners of the box. Make sure to cover the bottom inside corners with mortar to secure the adjuster bolts in their final position. This will physically lock the box into place. The entire box does not need to be surrounded by concrete. However, it is recommended that a small amount of concrete be poured around the outside bottom of the box to help maintain its position and strength throughout its use at the facility.

If the divider plate is to be eliminated, remove it at this time, but do reinstall the bolts to seal the outside of the box. Then backfill around the outside of the box with the same materials used in that particular cross section of the field, i.e. gravel, stone, asphalt, concrete, elastic layer, etc.
Turf Cover:
If Installing Synthetic Turf:

With the box installed at the correct elevation, **Turf from the surrounding field should be brought over the rim of the SEF900 box.** Pull the turf straight down into the box and then lay it horizontally across the inside angle. Cut off any extra turf that extends beyond the angle. Then trim the corners so that the turf is not overlapped and is lying in a single layer. Make sure that the turf is tucked tightly into the corners. **Next, place the clamping bars on top of the turf so that the turf is sandwiched between the angle and the clamping bar.** With an awl or screwdriver, puncture the turf through the aligned holes in the clamping bar and angle and insert the ¼ x 1” bolts and nuts and tighten.

- If a pad is to be used install it first. Use the marine plywood cover as a template to cut a piece of padding the same overall width, length and hole placement. Glue or staple the pad to the top of the wood cover. Again, using the panel as a template cut a piece of turf that will wrap around the edges of the cover. Staple and/or glue the turf in place. Cut an ‘X’ in the turf that is lying over the hand holes and wrap the four triangular flaps around to the bottom of the cover, trimming any extra turf. Staple and/or glue the flaps in place.

- Using ¼ x 1” bolts, attach the aluminum plate to the bottom of the turf / marine plywood cover by bolting from the bottom of the aluminum plate into threaded inserts (already inserted into the wood).

- Wrap the hand hole marine plywood covers with turf.
Electrical Conduit and Wiring

Through the open bottom of the box the wire conduits are exposed. Receptacle boxes can be installed directly to the inner panel of the aluminum with self-drilling screws. If a solid concrete bottom and drain are to be installed, be careful to slope the concrete bottom toward the outlet for positive drainage.

Notes:

*The communication boxes are not watertight, so proper drainage is required.*

UL approved electrical and communication junction boxes are to be used with watertight connections.
SportsEdge SEF900 Communication Box

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