EECO offers a wide range of special features and options to enhance your Elastomer Keypad design. EECO’s many custom features and options include special protective finishes, lighted keys, Encap enhanced key tops, and our PlaS Series hybrid plastic/rubber keypad assemblies. Let our years of elastomer keypad expertise enhance your next project with a custom elastomer keypad.

**DURACOAT** – Available in either matte or gloss finish, Duracoat is a polymer layer sprayed onto the silicone rubber keypad and permanently bonded by a vulcanization process at 200°C

- Simulated plastic finish
- Reduces friction to prevent keys sticking
- Enhanced keytop printing protection
- Excellent abrasion resistance, >200 cycles on RCA abrasion tester.
- Resists oils and solvents
- Temperature range - 40°C to ~ +90°C

**SCS PARYLENE** – Conformal coating meets MIL-I 46058C. Application of SCS Parylene by the Chemical Vacuum Deposition process provides a full conformal protective layer for the silicone rubber keypad.

- High crystalinity and molecular weight (~ 500K)
- Withstands continuous exposure to air at 100°C for 10 years (100,000 hours)
- Insoluble in any organic solvent up to 150°C
- Excellent vacuum stability (weight loss <0.3% under 10^6 torr, 50°C)
- Superior resistance to chemicals and gamma rays
- Excellent dielectric properties, (Volume resistivity >8.8 x 10^16 ohm/cm)
- Withstands impacts of over 100 in/lbs. at -160°C
- Lowest moisture transmission rate (10 times better than epoxy under 90% RH at 37°C
Elastomer Keypad Special Features

- **ENCAP SERIES** – Encap is a clear liquid polymer that gives a durable rigid plastic look and feel to silicone rubber keypads.
  - Simulated clear plastic finish
  - Protects keycap printing
  - Encap thickness 0.3 – 0.6 mm
  - Excellent abrasion resistance
  - Excellent bond between polymer and silicone
  - Available in hard or soft Encap, gloss finish

- **PlaS SERIES** – Using an advanced adhesive, the PlaS Series combines the durability of a molded plastic keycap with the functions of a rubber keypad.
  - Unlimited key shapes available
  - Any plastic material may be used for keys
  - Graphics printed on first or second surface
  - Reduces assembly and handling costs
  - Excellent bond between plastic and rubber

- **BackLight SERIES** – Designed to allow maximum visibility in the dark, the BackLight Series keypad is compatible with any illumination source. Made from translucent silicone rubber, the keypad is sprayed with a transmissive color underlayer and then oversprayed in an opaque color. Legends are etched out from the underlayer by a chemical process (flat keys only) or by laser etching. The keypad may be combined with Duracoat finishes to protect and enhance the keys.
  - Superior legend readability
  - Good light shielding
  - Any key shape may be illuminated
  - Temperature range -40°C to ~ +90°C