

# Build-Up Caps for Ionization Chambers



## *Acrylic and brass build-up caps for thimble chambers for use in high-energy photon beams*

### Features

- ▶ Photon energy ranges from  $^{60}\text{Co}$  up to 30 MV
- ▶ Establish electron equilibrium for in-air measurement
- ▶ Suitable for PTW Farmer and semiflex chambers
- ▶ Made of acrylic or brass

Build-up caps are used with thimble ionization chambers for in-air measurements in photon beams when electron equilibrium is desired. Each standard delivery of a thimble chamber includes an appropriate acrylic build-up cap for  $^{60}\text{Co}$ . Optionally, a variety of build-up caps is available for different ionization chamber types and for different photon energy ranges. Acrylic material is usually used for build-up caps. Acrylic build-up caps are more water-equivalent than brass build-up caps, but their size may be disadvantageous when used in small beams.

Acrylic build-up caps are available for the chamber types:

- 0.6 cm<sup>3</sup> PTW Farmer chambers
- 0.125 cm<sup>3</sup> and 0.3 cm<sup>3</sup> Semiflex chambers

The acrylic build-up caps are designed with wall thicknesses for various energy ranges from  $^{60}\text{Co}$  up to 30 MV photons.

Brass build-up caps are available for the chamber types:

- 0.125 cm<sup>3</sup> and 0.3 cm<sup>3</sup> Semiflex chambers

The wall thicknesses cover the energy range from  $^{60}\text{Co}$  to 20 MV photons.

### Ordering Information

Variety of acrylic and brass build-up caps upon request

- ▶ Semiflex Ionization Chambers *page 16*
- ▶ PTW Farmer Ionization Chambers *page 17*