Historic Plaster Conservation Services
Applied Science

CO R-100 BASE™ & CO Converter

CO R-100 BASE is the primary building-block for HPCS consolidation products. CO Converter is a concentrated formula that gives CO R-100 BASE the ability to deeply penetrate plaster, while also allowing for a stable mixture with water that prohibits mould and bacteria growth. CO R-100 BASE is mixed with CO Converter to create CO S-20 Primer™, CO S-50 Primer™ and CO R-100 Consolidation Agent™. Once prepared, these products are applied in conjunction with each other - wet-on-wet - to consolidate plaster ceilings and walls. These products are specially formulated to enhance penetration into plaster and to provide the tensile and structural adhesion strength required for long-lasting plaster consolidation. After they have coalesced they remain flexible enough to withstand a building's micro-movements and prevent cracking.

These products cannot be used independently. They are designed to be mixed on site with water in order to minimize shipping costs and waste.

Mixing Ratios for an 18.9 L (5 gal.):

CO S-20:	
CO R-100 BASE	3.8 Litres (1 gal)
CO Converter	66ml (2.23 oz)
Potable Water	15 Litres (3.96 gal)

CO S-50:	
CO R-100 BASE	9.5 Litres (2.51 gal)
CO Converter	66ml (2.23 oz)
Potable Water	9.3 Litres (2.46 gal)

CO R-100:	
CO R-100 BASE	18.8 Litres (4.97 gal)
CO Converter	66ml (2.23 oz)

A low pressure/high volume diaphragm pump with a standard compressor is the recommended spraying equipment.
Airless spray systems cannot be used to apply these products.

Application technique will vary depending on the specifics of application surface and access. Typically, S-20, S-50, and R-100 are applied evenly across the back side of the plaster with a series of horizontal and vertical passes.

Recommended coverage:

CO S-20:	**1.6 to 1.9 L per sq. m. (5.0 to 6.0 oz per sq. ft.)**
CO S-50:	**1.1 to 1.4 L per sq. m. (3.4 to 4.25 oz. per sq. ft.)**
CO R-100:	**0.6 to 0.8 L per sq. m. (1.75 to 2.5 oz. per sq. ft.)**