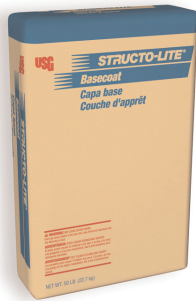


# Structo-Lite® Basecoat



**Where a lightweight, high-thermal-conductivity conventional plaster application is desired**

- Mill-mixed perlite-aggregate gypsum plaster; requires only the addition of water at the jobsite.
- Ideal where it is not desirable to mix aggregate with plaster on the job.
- Lightweight plaster; weighs less than half as much as sanded plaster.
- Excellent for areas requiring highly insulated plaster; provides “k” factor of 1.74, three times the insulation value of sanded plaster.

**Description**

STRUCTO-LITE® BRAND Basecoat is a mill-mixed perlite-aggregate gypsum plaster. It requires only the addition of water at the jobsite.

STRUCTO-LITE Basecoat is USG’s lightest-weight and most highly insulated plaster.

STRUCTO-LITE Basecoat provides a plastic working material that will conform to various designs and help achieve durability in walls and ceilings. It can be applied by hand or machine methods, on gypsum or metal lath, clay tile, concrete or cinder blocks and other approved plaster bases.

**Fire Protection** Gypsum plasters specially made for fire-protection applications and used with specified plaster bases, provide excellent fire protection.

**Sound Isolation** In certain systems, gypsum plasters offer sound transmission loss characteristics suitable for most requirements. Sanded basecoat plaster provides optimum results.

**Control of Set** STRUCTO-LITE Basecoat is formulated for use in varying climatic conditions and job conditions. The quicker a gypsum plaster sets, the stronger the basecoat.

**Limitations**

1. Not recommended over metal lath when a smooth trowel finish is required.
2. Not recommended for machine application when vertical lift exceeds 30 ft. or hose length is over 150 ft.
3. Requires a lime-gauging finish plaster containing a fine aggregate to control surface cracking.
4. Over interior monolithic concrete, USG™ Plaster Bonder must be applied before plastering.
5. Application on masonry or concrete walls, or ceilings that have been coated with bituminous compounds or other waterproofing agents, is not recommended. The interior surface of exterior walls should be furred and lathed prior to plastering to prevent seepage and condensation.
6. Basecoat plasters must not die or stop against a hollow metal doorframe return. Provision must be made to dampen the trim return vibration by grouting, and by the use of special anchors. The grout must be raked out to allow lath and plaster to be inserted into the frame.
7. Gypsum plasters cannot be used in exterior applications or where they will come into contact with water or excessive moisture.

**Directions**

**Preparation**

In cold weather, all glazing should be completed and the building heated to a minimum 55 °F (13 °C) before gypsum base or lath and plaster installation. The temperature of the building must be maintained in uniform range above 55 °F for an adequate period prior to application of plaster, while plastering is being done, and until plaster is dry. Heat should be well distributed in all areas, with deflection or protective screens used to prevent concentrated or irregular heat on the plaster surfaces.

Ventilation and air circulation should be provided to properly dry the plaster subsequent to plaster applications and proper set. This can be accomplished by keeping windows open sufficiently to provide air circulation in glazed buildings; in enclosed areas lacking normal ventilation, provisions must be made to mechanically remove moisture-laden air.

If glazed sashes are not in place and the building is subject to hot, dry winds or temperature differentials from day to night of 20 °F (11 °C) or more, openings must be screened with cheesecloth or similar material.

**Application**

**Mixing Conventional Plaster** STRUCTO-LITE Basecoat contains mill-mixed aggregate, so it is mixed with water *only* on the jobsite. Mix basecoat plaster by hand or in a mechanical mixer to a uniform consistency. Use potable (drinkable) water and clean mixing tools. Plaster can be mixed using a heavy-duty power drill equipped with a mixing paddle, or a professional-style self-contained mixer. Water usage is approximately 12 to 15 quarts (3 to 3.75 gallons) per 50 lb. bag. Sift plaster into water and blend with power agitator. Mix initially to a heavy (stiff) viscosity to disperse the powder into the water. Mix until smooth and lump-free, then add any remaining water to obtain the desired consistency. DO NOT retemper.

**Applying Basecoat** Apply the basecoat plaster by hand or machine in one or two coats. Unit masonry surfaces that exhibit high suction shall be moderately wetted immediately before plastering.

For two-coat work over gypsum lath and masonry, apply STRUCTO-LITE Basecoat (first coat) with sufficient material and pressure to form a good bond to the base and to cover well; then double-back to bring the plaster out to grounds. Straighten to a true surface with a rod and darby without the use of additional water and leave rough to receive the finish (second) coat.

For three-coat work, apply STRUCTO-LITE Basecoat scratch (first) coat with sufficient material and pressure to form good full keys on metal lath, and good bond on other bases, then cross-rake. Apply brown (second) coat after scratch (first) coat has set firm and hard. Bring out to grounds and straighten to a true surface with a rod and darby without the use of additional water. Leave the brown coat rough to receive the finish (third) coat. See "Limitations" for information regarding finish plastering over STRUCTO-LITE Basecoat.

**Product Data**

**Approximate Coverage—sq. yd./ton Applied over a base of:**

Product	Gypsum Lath	Metal Lath	Unit Masonry
STRUCTO-LITE Basecoat	140	89	109

**Compressive Strength (Dry):** 700 psi. (Average laboratory results. Figures may vary slightly for products from individual mills. Tested in accordance with ASTM C472.)

**Weight (Dry):** 50lb./cu. ft.

**Compliance with Standards:** Complies with ASTM Designation C28; STRUCTO-LITE Basecoat meets Federal Specification SS-P-00402B, Type I.

**Thermal Coefficient of Expansion (Unrestrained):** STRUCTO-LITE Basecoat— $7.3 \times 10^{-6}$  in. per in. per °F (40-100 °F); 13.1 mm per mm per °C (4.5-37.8 °C).

**Hygrometric Coefficient of Expansion (Unrestrained):** STRUCTO-LITE Basecoat— $4.8 \times 10^{-6}$  in. per in. per % relative humidity (5-90% r.h.);  $4.8 \times 10^{-6}$  relative humidity (5-90% r.h.).

**Storage:** Store material in a cool, dry place. Avoid direct sunlight. Maintain temperature above 40 °F (4 °C).

**Shelf Life:** Up to 6 months under protected storage conditions. Rotate stock.

**Availability and Cost:** STRUCTO-LITE Basecoat is distributed throughout the United States. Contact a United States Gypsum Company sales office or sales person for additional information.

**Packaging:** STRUCTO-LITE Basecoat is available in 50 lb. bags (22.7 kg). (40 bags per pallet. Pallet dimensions: 48" x 40".)

**Submittal Approvals:**

<b>Job Name</b>	
<b>Contractor</b>	<b>Date</b>

**WARNING!**

When mixed with water, this material hardens and becomes very hot - sometimes quickly. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Dust may cause irritation to eyes, skin, nose, throat and upper respiratory tract. Avoid irritation by reducing exposure to dust. Use in a well-ventilated

area or provide sufficient local ventilation. Do not ingest. If dusty, wear a NIOSH/MSHA-approved dust respirator. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Wash with soap and water after use. If ingested, call physician. Product information and MSDS: (800) 507-8899 or www.usg.com.

**KEEP OUT OF REACH OF CHILDREN.**

**Additional Information**

This document is intended as a product submittal only. For complete information regarding STRUCTO-LITE Basecoat, please refer to the following literature:  
 – *The Gypsum Construction Handbook*  
 – Plasters System Brochure (SA920)  
**Trademarks**  
 The following are trademarks of United States Gypsum Company or a related company: STRUCTO-LITE, USG.

**Note**

Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for information.  
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 We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods.

Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.  
**Safety First!**  
 Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

