# **USG SECUROCK<sup>®</sup> BRAND** HIGH-PERFORMANCE ROOF BOARD APPLICATIONS

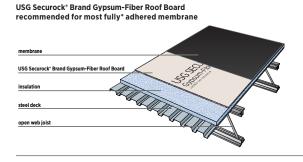
### There are four basic components in a low-slope commercial roof assembly:

- A structural deck and joists, which can be formed of steel, wood or concrete
- Insulation, including polyisocyanurate (ISO), extruded polystyrene (XPS) or expanded polystyrene (EPS)
- Roof cover board installed between the insulation and the roofing membrane to protect the insulation and support the membrane, improving fire protection, traffic and hail resistance, and wind-uplift performance
- A membrane or membrane system, which can be built-up roofing (BUR), single-ply or modified bitumen

The following are for illustration purposes only. USG Securock® Brand high-performance roof boards are engineered to perform within a properly designed roof system. The use of USG Securock high-performance roof boards as a roofing component is the responsibility of the design professional. Consult roofing manufacturers for specific instructions on the application of their products to USG Securock high-performance roof boards.

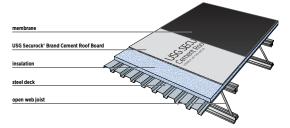
### COVER BOARD

USG Securock high-performance roof board is placed directly below the roofing membrane, providing primary support for the membrane and protecting the underlying insulation layer from damage during installation and for the service life of the roof. Cover boards are used as impact protection for insulation boards (foot traffic, hail, etc.), to insulation protection from EPDM heat transfer, a surface to which asphalt can be mopped, and as a fire barrier for external fire.

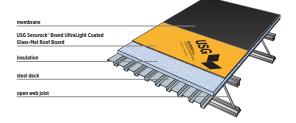


USG Securock\* Brand UltraLight Glass-Mat Roof Board recommended for mechanically attached membrane fastner membrane USG Securock\* Brand UltraLight Giass-Mat Roof Board insulation steel deck open web joist

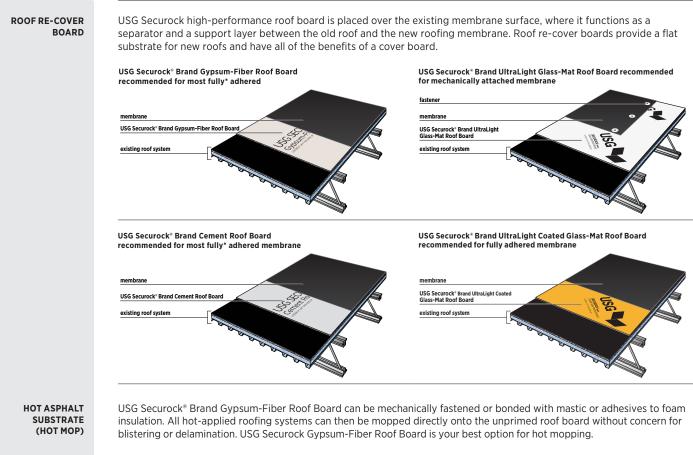
USG Securock\* Brand Cement Roof Board recommended for most fully\* adhered membrane



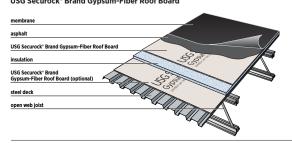
USG Securock\* Brand UltraLight Coated Glass-Mat Roof Board recommended for fully adhered membrane



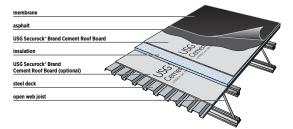




USG Securock\* Brand Gypsum-Fiber Roof Board



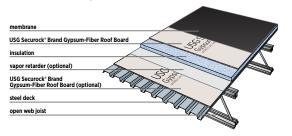
USG Securock\* Brand Cement Roof Board



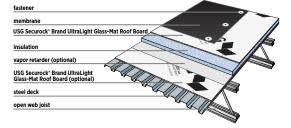
#### SUBSTRATE FOR VAPOR RETARDERS

USG Securock high-performance roof board is placed over the roof deck to provide support for the vapor barrier. The membrane may be loose laid; attached with cold mastics, hot asphalt or adhesives; or mechanically fastened, depending on the roof assembly. The roof board is used as a substrate for retarder adhesion to reduce condensation.

# USG Securock\* Brand Gypsum-Fiber Roof Board recommended for fully adhered membrane



USG Securock\* Brand UltraLight Glass-Mat Roof Board recommended for mechanically attached membrane

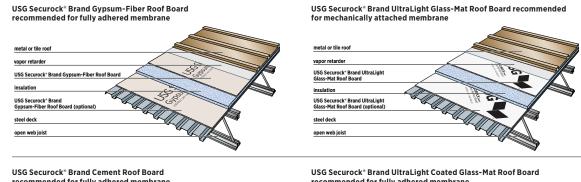


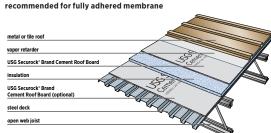
#### SUBSTRATE FOR VAPOR RETARDERS CONT.



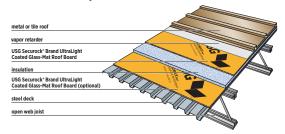
## METAL OR TILE ROOF THERMAL BARRIER

USG Securock high-performance roof board provides a thermal barrier in conjunction with a standing-seam metal or tile roofing system. It also provides noise reduction and hail resistance. Thermal barriers reduce thermal "shock" and slow heat escape from building and act as a fire barrier for internal fire.



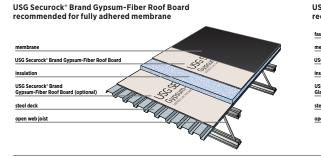


recommended for fully adhered membrane

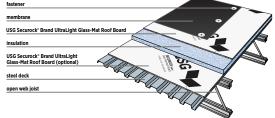


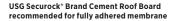
### THERMAL BARRIER

USG Securock high-performance roof board provides a thermal barrier installed directly to metal deck for both expanded and extruded polystyrene insulation. Thermal barriers reduce thermal "shock" and slow heat escape from building and act as a fire barrier for internal fire.

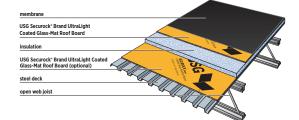


#### USG Securock\* Brand UltraLight Glass-Mat Roof Board recommended for mechanically attached membrane



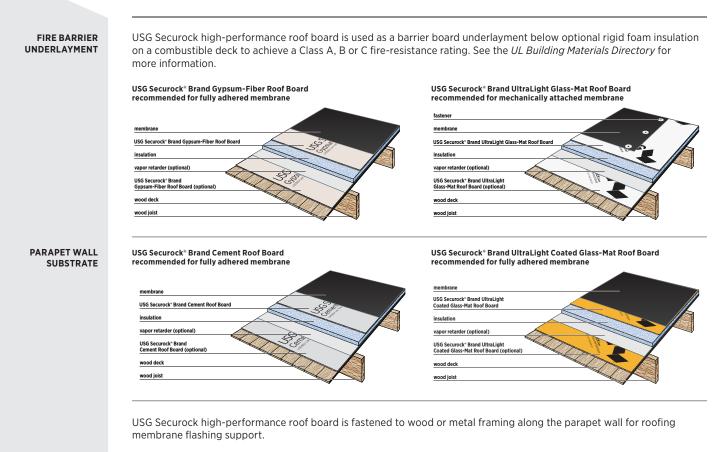


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USG Securock <sup>®</sup> Brand Cement Roof Board		$\leq$	Sa	
insulation			SE	
USG Securock* Brand Cement Roof Board (optional)	- The second sec	- 5 5		
steel deck				L
open web joist				
		* VK	UT A	

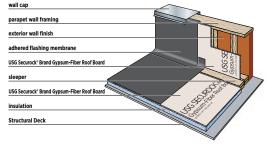


USG Securock\* Brand UltraLight Coated Glass-Mat Roof Board

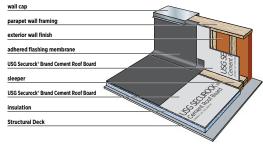
recommended for fully adhered membrane



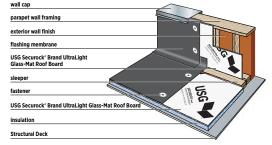
USG Securock\* Brand Gypsum-Fiber Roof Board recommended for most fully® adhered membrane



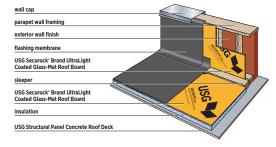
USG Securock\* Brand Cement Roof Board recommended for most fully\* adhered membrane



USG Securock\* Brand UltraLight Glass-Mat Roof Board recommended for mechanically attached membrane



# USG Securock\* Brand UltraLight Coated Glass-Mat Roof Board recommended for fully adhered membrane



#### **VEGETATIVE ROOFS**

USG Securock high-performance roof boards provide an exceptional base for all vegetative roof assemblies while protecting the underlaying insulation from damage.

growing medium

retention mat

drainage layer

insulation

steel deck

open web joist

protection barrie

membrane w/ fasteners

vapor retarder (optional)

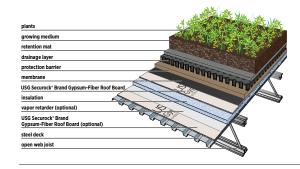
USG Securock<sup>®</sup> Brand UltraLight Glass-Mat Roof Board

USG Securock\* Brand UltraLight Glass-Mat Roof Board (optional)

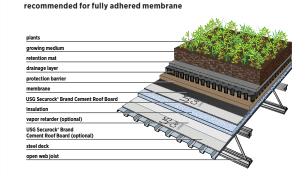
USG Securock\* Brand Gypsum-Fiber Roof Board recommended for fully adhered membrane

USG Securock<sup>®</sup> Brand Cement Roof Board

#### USG Securock\* Brand UltraLight Glass-Mat Roof Board recommended for mechanically attached membrane



USG Securock\* Brand UltraLight Coated Glass-Mat Roof Board recommended for fully adhered membrane



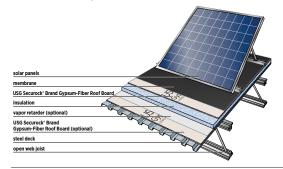
plants growing medium retention mat drainage layer protection barrier membrane USG Securock-Brand UltraLight Casted Glass-Mat Roof Board securock-Brand UltraLight Casted Glass-Mat Roof Board (optional) stel dack pen web joist

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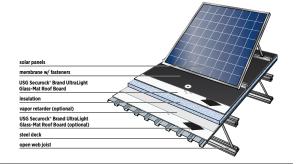
#### SOLAR ROOFS

USG Securock high-performance roof boards provide a strong and stable base for all solar roof assemblies while protecting the underlaying insulation from damage.

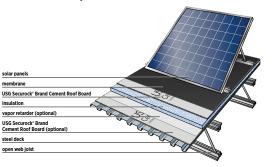
#### USG Securock<sup>®</sup> Brand Gypsum-Fiber Board recommended for fully adhered membrane

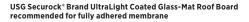


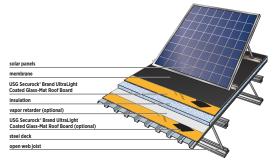
# USG Securock\* Brand UltraLight Glass-Mat Roof Board recommended for fully adhered membrane



#### USG Securock\* Brand Cement Roof Board recommended for fully adhered membrane







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Manufactured by United States Gypsum Company 550 West Adams Street Chicago, IL 60661

800 USG.4YOU 800 (874-4968) usg.com/securock \* For fully adhered fiberglass reinforced membranes consult the membrane manufacturer.

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