

MR-MANUFACTURER

SPAN-ROCK® Gypsum Plank, used in roof decks and interstitial decks, is manufactured by United States Gypsum Company, a leader in construction materials and building systems for 90 years. Check your local U.S. Gypsum Company Technical Service Representative for the availability of these products in your area.

PP-PRODUCT PRESENTATION

Roof Decks

SPAN-ROCK Gypsum Plank roof decks combine the performance of poured gypsum decks with the convenience and simplicity of dry/unit installation. Two basic low-cost deck systems both function equally well at any slope from flat to 75 degrees:

- * Medium-span systems of planks on steel tee subpurlins, spanning between bar joist or other structural framing members.
- * Short-span systems of planks only, spanning across closely spaced, wood or light steel framing.

SPAN-ROCK Gypsum Planks are nominally 2" thick, 2' wide, 8' long, and are factory-laminated of two gypsum panels. Each plank weighs approximately 135 lbs. Panels consist of a fire-resistant core encased in strong, water-resistant paper facings. Offset plank edges, created by the two panels being of slightly different width, facilitate grouting at sub-purlins and ensure maximum bond.

Interstitial Decks

SPAN-ROCK Gypsum Plank interstitial decks are lightweight, noncombustible assemblies suspended from the floor structure above to create an interstitial space for the locating and servicing of all utilities and mechanical equipment.

This 2-5/8" deck assembly consists of 2" thick, 24" wide SPAN-ROCK Gypsum Plank and 5/8" thick SPAN-ROCK Gypsum Panels on subpurlins. The plank and panel may be installed individually or as a single factory laminated 2-5/8" thick unit. A dry system, it offers economy, performance and adaptability to meet varied job conditions.

UA-USES, APPLICATIONS

These systems may be used for roof and interstitial decks.

AI-ASSEMBLY, INSTALLATION

Medium-Span Roof Deck System Installation -- Planks on Steel Tee Subpurlins

These systems of planks and parallel supporting subpurlins are suitable for subpurlin/plank spans of up to 10' between framing members. Subpurlins/planks may be parallel or perpendicular to ridge of sloped roofs, depending upon direction of framing. Subpurlins are welded to bar joists or purlins. Planks are supported on subpurlin flanges, anchored with PYROFILL® Gypsum Concrete or USG Moulding Plaster Grout. Screws are required on steeply sloped roofs, as described below. Grout is poured into voids between

plank edges and subpurlins, then struck flush with the plank, providing a smooth unbroken surface ready for roofing.

On sloping roofs, thrust angles must be provided at the eaves to fully resist downward thrust of the planks. On roof slopes from 45 to 75 degrees, each plank must be screw attached to subpurlin at mid-span, regardless of plank/subpurlin direction.

Short-Span Roof Deck System Installation -- Planks Across Wood or Light Steel Framing

Planks are placed (ship lapped without tees) directly on wood or steel framing members spaced up to 24" o.c. (max. plank span). Plank ends must bear on supports and are anchored with screws. On sloping roofs, fasteners resist the entire plank thrust and so must be of the number required according to manufacturer's instructions. Thrust angles are not needed when purlins run with slope of roof. With wood and light steel joists, wood nailers are used around all roof and roof opening perimeters to attach fascias and other wood trim.

Interstitial Deck System Installation

Prior to starting installation, the SPAN-ROCK contractor shall arrange with others for placement of hangers and light beam supporting framework to acceptable spacing tolerance for gypsum plank and supporting members.

Place subpurlins at required spacing, typically 24-5/8" o.c. Weld subpurlins to purlins and other steel framework provided with min. 3/4" long fillet welds on each side of each support.

For two-hour fire-rated interstitial deck, place 5/8" panels centered between subpurlins. Place plank with width centered between subpurlins. Install cross tees to support end joints of plank. Support plank ends and edges at perimeter and openings.

Mix grout in a mechanical mixer to a uniform consistency according to manufacturer's directions shown on bag. Place mix into cavity, fill joints with grout and squeegee excess to level surface. Repair surface damage with grout as required.

MF-MATERIALS, FINISHES

For roof decks and interstitial decks, materials include SPAN-ROCK Gypsum Plank and USG Steel Subpurlin.

CS-COATINGS, SURFACINGS

The roof and interstitial decks will be finished according to specifications.

TS-TECHNICAL SUPPORT

For further information on specifications, design criteria and product performance, order catalog *IR-564 SPAN-ROCK Gypsum Plank* by calling 1-800-USG-4YOU (874-4968).

CC-CODES, COMPLIANCE

Fire-rated Roof Deck Systems are available up to 2 hrs. for UL Design U676 and 1-1/2 hrs. for UL Designs P207, P228, P229, P242, P244, P247, P504 and P506.

Interstitial Deck Systems meet 2-hr. fire-resistance requirements of Veterans Administration as described in NBSIR 85-315 "Fire Performance of Interstitial Space Construction System."

OM-OPERATION, MAINTENANCE

Contact local U.S. Gypsum Company Technical Service Representative with any questions about maintenance and replacement recommendations.