Roof Board products, including with-
and storage of its DEXcell™
for the recommended use, installation
ations and Limitations as guidance
the following Product Recommend-
ations below. National Gypsum makes
require practices that do not conform
construction code requirements may
ufacturer, or any applicable design or
professional, the roof system manu-
project, the project’s roof design
and it is possible that for any given
of a multi-component roof assembly
typically constitute one component
Roof Board. DEXcell roof products
Roof Board, DEXcell™ FA Glass Mat
Roof Board, and DEXcell™ Cement

National Gypsum Company®

National Gypsum offers no recom-
endations regarding the following
aspects of a roof assembly:
level of roof assembly to be
(single ply, modified bitumen,
built-up roof, etc.)
ifications of the other
in the roof assembly
Whether to use a separator sheet
or vapor barrier between DEXcell
roof boards and any other com-
ponent of the roof assembly

Design
Recommendations
DEXcell roof boards form one com-
ponent among many components in
a properly designed roof assembly.
National Gypsum does not warrant
the design, quality or workmanship
of any other components in any
roof assembly in which the DEXcell
products may be used or of the roof
assembly as a whole. Specifically,

Product Recommendations and Limitations

National Gypsum Company™
("National Gypsum") has provided
the following Product Recommend-
ations and Limitations as guidance
for the recommended use, installation
and storage of its DEXcell™ BRAND
Roof Board products, including with-
out limitation, DEXcell™ Glass Mat
Roof Board, DEXcell™ FA Glass Mat
Roof Board, and DEXcell™ Cement
Roof Board. DEXcell roof products


<table>
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<tr>
<th>Roof System Applications</th>
<th>DEXcell FA – Glass Mat Roof Boards</th>
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<th>DEXcell Cement Roof Boards</th>
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<td>Single Ply - Fully Adhered</td>
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<td>Recommended</td>
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<tr>
<td>Single Ply - Mechanically Attached</td>
<td>Acceptable*</td>
<td>Recommended</td>
<td>Recommended</td>
</tr>
<tr>
<td>Single Ply - Self Adhered</td>
<td>Recommended</td>
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<td>Recommended</td>
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<tr>
<td>Modified Bitumen - Hot Mop</td>
<td>Not Recommended</td>
<td>Not Recommended</td>
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<tr>
<td>Modified Bitumen - Cold Adhesive</td>
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<tr>
<td>Modified Bitumen - Torch</td>
<td>Recommended</td>
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<td>Recommended</td>
</tr>
<tr>
<td>Modified Bitumen - Self Adhered</td>
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<td>Spray Polyurethane Foam</td>
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<tr>
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<tr>
<td>Fire Barrier</td>
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<tr>
<td>Substrate for Vapor Barrier</td>
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<td>Acceptable*</td>
<td>Recommended</td>
</tr>
<tr>
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<td>Acceptable*</td>
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<tr>
<td>Wood Shake Underlayment</td>
<td>Acceptable*</td>
<td>Recommended</td>
<td>Acceptable*</td>
</tr>
</tbody>
</table>

*Indicates product applications that may be used successfully, but may not be optimal in terms of cost or performance as compared to the recommended product.

**Note:** In situations where prolonged excessive membrane surface temperatures may be experienced, such as dark-colored membranes in southern climates, roof surfaces that experience reflected sunlight or photovoltaic installations, DEXcell Cement Roof Board is the preferred DEXcell product.

**Application Limitations**

The performance of any DEXcell product may be negatively impacted by excess moisture, heat or pressure. The recommendations and limitations below are intended to lower the risk of excess moisture, heat and loads. Failure to observe these recommendations and limitations may void the warranty.

**Adhesives and Primers**

DEXcell FA – Glass Mat Roof Board and DEXcell Cement Roof Board are the preferred products for use in fully adhered roof systems, subject to the following limitations:

**Solvent-Based Adhesives and Primers.** Solvent-based adhesives and primers should be used in accordance with the manufacturer’s procedures. Installers must allow sufficient time for solvents and primers to evaporate after application to avoid potential damage to the DEXcell products or other components. Excessive use of solvent-based adhesives increases the risk of blisters. For water-based adhesives, follow manufacturer’s recommendations. Confirm any priming requirements of DEXcell products with the membrane manufacturer.

**Cold Adhesives.** Cold adhesives should be applied uniformly as necessary for good bond. Excessive use of cold adhesives increases the risk of blisters.

**Torch Down Roofing.** When applying a membrane using a “torch down” application method, all products must be dry prior to beginning the installation. Use proper torch technique and limit the amount of heat placed on the DEXcell roof boards by aiming the torch flame directly at the roof membrane roll and not at the DEXcell roof boards. Avoid overheating the membrane or DEXcell product surface. Check with the roof system manufacturer or roof design professional for their attachment requirements for each project.
Do not apply fully adhered membranes (solvent-based, water-based, cold adhesives, peel and stick, torched, hot mopped) to wet or dampened DEXcell products. All components of a roof assembly must be thoroughly dry prior to installation of the roof membrane. DEXcell products should not be installed during rain, heavy fog, or any other conditions that could deposit moisture on the surface of the roof boards.

To reduce the impact of environmental moisture, DEXcell roof boards must be covered by the roof system membrane the same day they are installed. Install only as many DEXcell roof boards as can be covered by the final roof covering in the same day.

Appropriate moisture control measures should be taken when installing DEXcell products on new poured concrete or lightweight concrete roof deck, or when re-roofing over an existing concrete roof deck, in accordance with recommendations by roof design professionals, roof system manufacturers, and any applicable design or construction code requirements. Re-roof or re-cover applications must be thoroughly dry prior to installation of DEXcell products.

**Installation Recommendations**

National Gypsum Company makes no representations or warranties regarding best practices in the design or installation of roof assemblies. Refer to the applicable roof system manufacturer’s written instructions, industry best practices, local code requirements and FM Global™ (FM) and/or UL™ requirements for proper installation techniques. In addition to the limitations regarding heat, moisture and loads in the sections above, DEXcell products are subject to the following installation recommendations and limitations:

Only mechanical fasteners approved by FM or UL should be used with DEXcell products and such fasteners should be installed in strict compliance with the roof system manufacturer’s installation recommendations and the most current applicable FM Loss Prevention Data Sheets. Proper fastener spacing is essential to achieve the proper wind-uplift performance. Install only as many DEXcell roof boards as can be covered by the roof membrane system during the same day. Locate joints parallel to the deck ribs on the ribs of the steel roof deck. See the product data table for maximum flute span when panels are installed directly over steel roof decking. Stagger end joints of adjacent lengths of DEXcell roof board. In typical installations, butt board edges and ends loosely. The design authority should calculate the appropriate spacing between roof boards to allow for thermal expansion based on typical post-installation roof temperature and accounting for installation conditions, in each case based on published DEXcell product properties data.

For vertical parapet applications, only 1/2” or 5/8” DEXcell FA – Roof Board Boards or DEXcell Cement Roof Boards should be used. Maximum framing spacing is 24” o.c. for 5/8” DEXcell FA Glass Mat Roof Boards and 16” o.c. for both the 1/2” DEXcell FA Glass Mat Roof Board and 7/16” DEXcell Cement Roof Board.

**Storage Recommendations**

Keep DEXcell products dry at all times before, during and after the installation of the roof system. Upon receipt by the customer, all plastic packaging must be removed from the DEXcell roof boards immediately, and the DEXcell roof boards must be fully covered with a breathable, waterproof covering. Failure to immediately remove the plastic packaging may result in condensation or moisture being trapped on or in the product and may void the warranty. DEXcell roof board must never be stored on the ground and must always be stocked flat. Air must be allowed to circulate around and under the stored bundles of DEXcell roof board to avoid build-up of moisture.