



Technical Bulletin

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Title: 3M™ Daylight Redirecting Film (DRF) Frequently Asked Questions – Customers

1. What should I do with my blinds?

In order to maximize the effectiveness of DRF, 3M recommends that you reposition your blinds below the DRF so they cannot block the redirected light.

2. How should I adjust/install lighting controls now that I've got DRF?

3M has provided a document called 3M Daylight Redirecting Film Design Guide, that provides guidance on how to install or modify lighting controls when used in conjunction with 3M DRF.

3. How do I calculate how much energy I saved with the DRF?

3M has completed case studies with the US Government, Sacramento Municipal Utilities Department, Lawrence Berkely National Laboratories, as well as HMG a leading lighting consultant. The results of the case studies show up to 52% lighting energy savings, and up to 8ft of increased daylighting zones for every 1 ft (0.3m) vertically installed film. 3M has completed numerous daylighting models for buildings in different locations that can be provided to estimate daylighting depth in your location and building design.

For very detailed analysis a lighting design professional can utilize the Radiance software to calculate performance on your specific location.

4. How much more light is brought into my building and how deep does it go?

The DRF redirects up to 90% of the visible light toward the ceiling at certain incident angles. The depth of penetration is dependent on the amount of DRF installed, the ceiling height, and the finishes on the ceiling and walls. However, it is not uncommon to measure an appreciable increase in the light levels at a depth up to 40 ft (12.1m).

5. Will the film be effective on all orientations?

While the 3M DRF can provide some light redirection for all orientations, it is designed to redirect direct sunlight. Therefore it will be most effective for windows that receive direct sunlight. In the northern hemisphere this would be east, south and west facing windows.

6. How do I know if the film is installed correctly?

If you are unsure about the orientation of your film after installation, please contact the installing dealer for further inspection and verification.

7. Can I pattern (die cut) the film?

At this time we are not recommending die-cutting the 3M DRF.

8. Why can't I see through the film?

The DRF incorporates a diffuser which helps soften the redirected light and also help the redirected light penetrate further into the building. In order to work properly, the diffuser must be opaque.

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