When installed in a ceiling grid system or hung independently, G&S Acoustics’ Quadratic Residue Ceiling Diffusers use their shape to **reflect sound evenly** in a room. Quadratic Residue Ceiling Diffusers improve sound quality by disrupting standing sound waves that occur between parallel surfaces such as ceilings and floors.

Our Quadratic Residue Ceiling Diffusers are designed using the **quadratic residue sequences** of elementary number theory to effectively diffuse sound frequencies ranging from 775 - 2260 Hz. Now available in 2’x2’ and 4’x4’ modules.

**QUADRATIC RESIDUE CEILING DIFFUSER - QRCD**

### Core
- QRCD: 0.125 Thermoformed co-polymer (recyclable)

### Sizes
- 2’x2’, 4’x4’

### Well Depth
- 1-1/4”, 2-1/2”, and 5”

### Well Width
- 3”

### Mounting
- 15/16” Lay-in ceiling grid system
- Direct mount to ceiling

### Finish
- Textured white finish

### Flammability
- All components have a Class “A” rating per ASTM E84

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**Sound Absorption - E-400 Mounting Test Method**

<table>
<thead>
<tr>
<th>Hz</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>NRC</th>
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<td>QRCD</td>
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<td>.62</td>
<td>.35</td>
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**Sound Scattering**

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<th>1000</th>
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<td>.33</td>
<td>.64</td>
<td>.81</td>
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