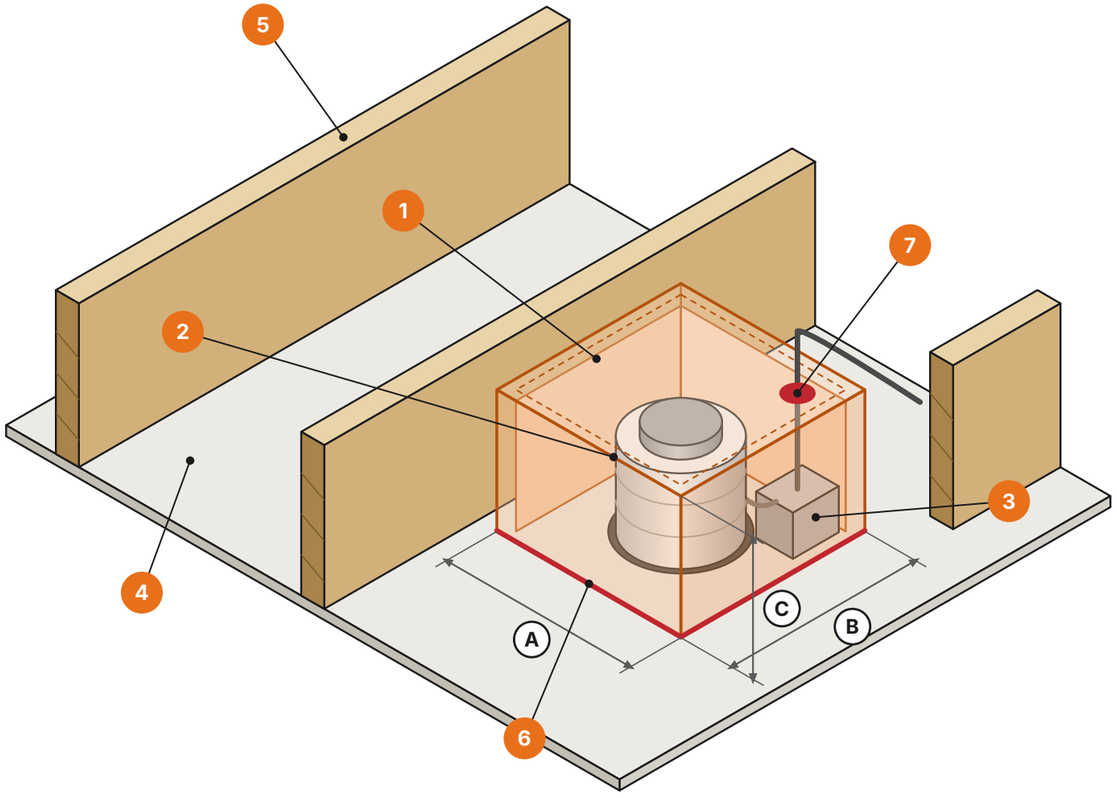
APPLICATION DETAIL

BOX ENCLOSURE · RECESSED POT LIGHT

Fire and smoke rated drywall ceiling | Groove Manufacturing Group Inc.

1 ISOMETRIC CUTAWAY

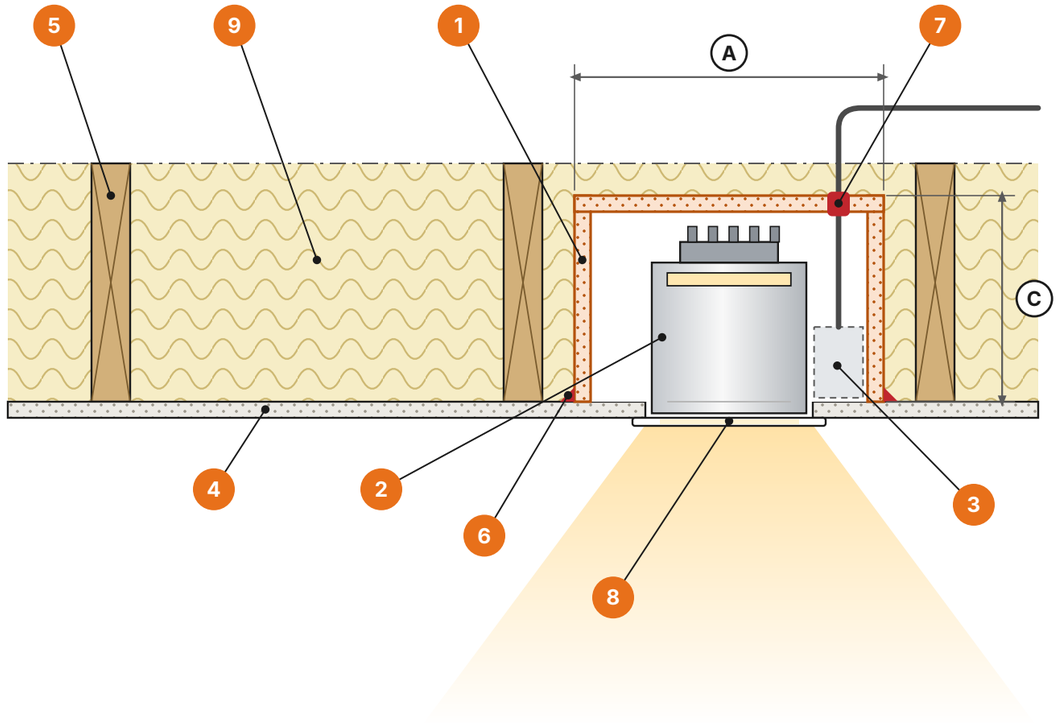
View from above the ceiling



Enclosure shown transparent for clarity. Front joist cut away.

2 SECTION A–A

Through the ceiling and enclosure, not to scale



Section cut through joists. Junction box behind housing shown dashed.

KEYNOTES

1. **GMG Box Enclosure**
   Fire-rated drywall, 1 or 2 layers, 1/2 or 5/8 in
2. **Recessed pot light housing**
   Sits fully inside the enclosure
3. **Junction box / LED driver**
   Kept inside the enclosure
4. **Drywall ceiling**
   Part of the fire and smoke rated assembly
5. **Ceiling joists**
   Enclosure fits between framing
6. **Fire and smoke sealant**
   Continuous at enclosure-to-ceiling joint
7. **Sealed cable penetration**
   Firestop sealant around supply cable
8. **Pot light trim**
   Finished side, below ceiling
9. **Insulation**
   Held clear of the fixture by the enclosure

HOW IT WORKS

Cutting a pot light into a rated ceiling leaves an opening above it. The enclosure caps that opening with drywall, so the ceiling keeps its fire and smoke separation around the fixture.

A = width, B = depth, C = height (finished-side). Size to the fixture and verify the required rating with the authority having jurisdiction.

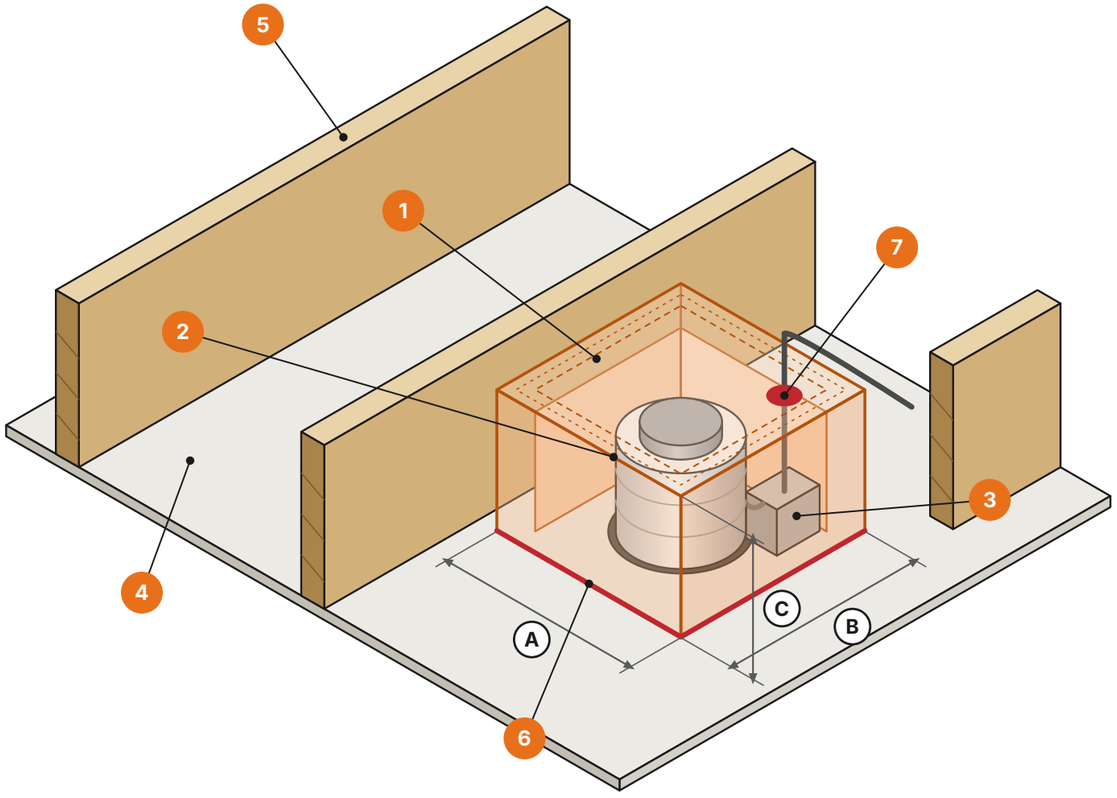
APPLICATION DETAIL · DOUBLE LAYER

DOUBLE LAYER BOX ENCLOSURE · POT LIGHT

Fire and smoke rated drywall ceiling | Groove Manufacturing Group Inc.

1 ISOMETRIC CUTAWAY

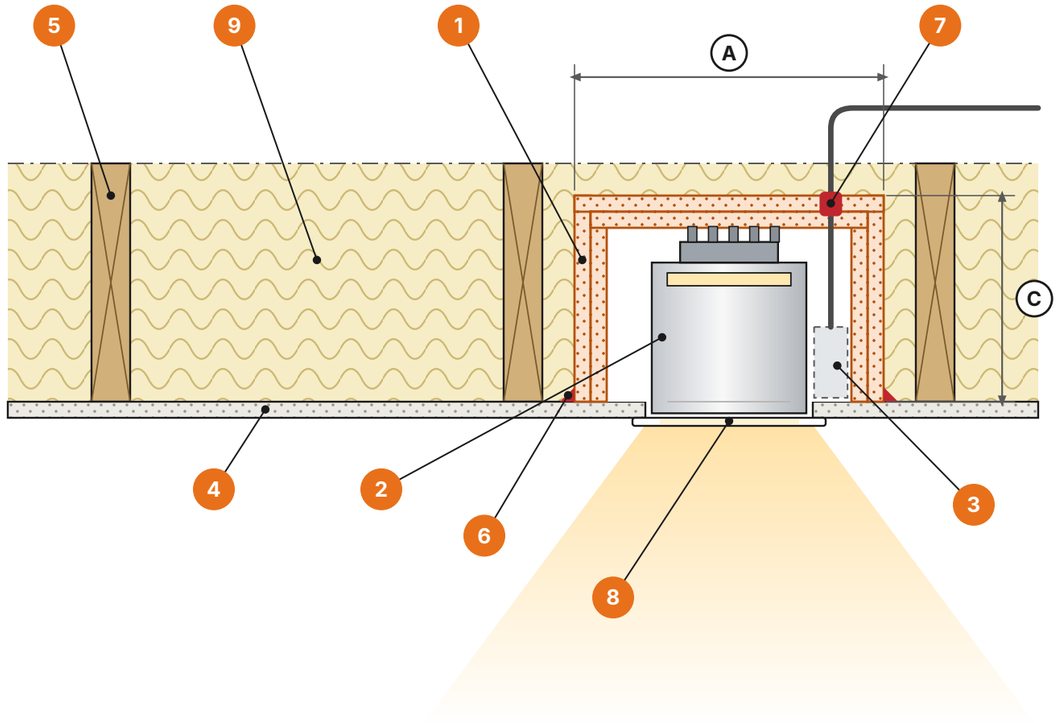
View from above the ceiling



Enclosure shown transparent for clarity. Front joist cut away.

2 SECTION A–A

Through the ceiling and enclosure, not to scale



Section cut through joists. Junction box behind housing shown dashed.

KEYNOTES

1. **GMG Box Enclosure, double layer**
   Two layers fire-rated drywall, 1/2 or 5/8 in
2. **Recessed pot light housing**
   Sits fully inside the enclosure
3. **Junction box / LED driver**
   Kept inside the enclosure
4. **Drywall ceiling**
   Part of the fire and smoke rated assembly
5. **Ceiling joists**
   Enclosure fits between framing
6. **Fire and smoke sealant**
   Continuous at enclosure-to-ceiling joint
7. **Sealed cable penetration**
   Firestop sealant around supply cable
8. **Pot light trim**
   Finished side, below ceiling
9. **Insulation**
   Held clear of the fixture by the enclosure

HOW IT WORKS

Cutting a pot light into a rated ceiling leaves an opening above it. The enclosure caps that opening with drywall, so the ceiling keeps its fire and smoke separation around the fixture.

A = width, B = depth, C = height (finished-side). Size to the fixture and verify the required rating with the authority having jurisdiction.

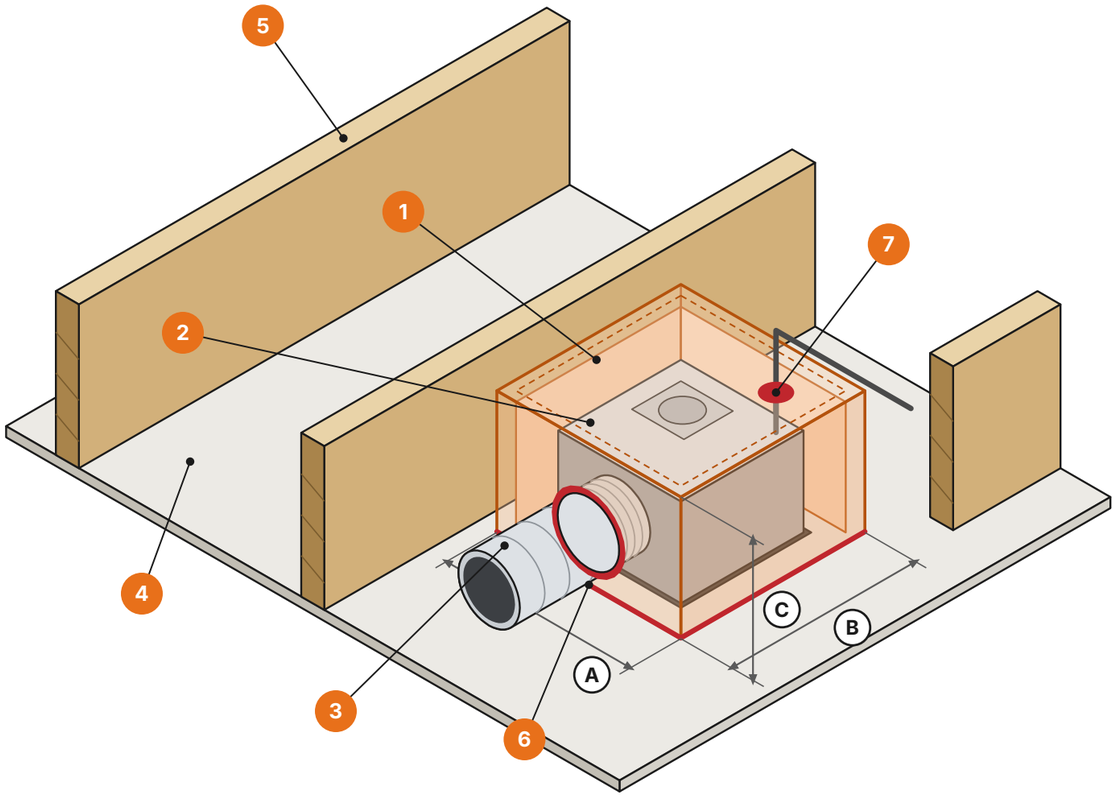
APPLICATION DETAIL

BOX ENCLOSURE · EXHAUST FAN

Fire and smoke rated drywall ceiling | Groove Manufacturing Group Inc.

1 ISOMETRIC CUTAWAY

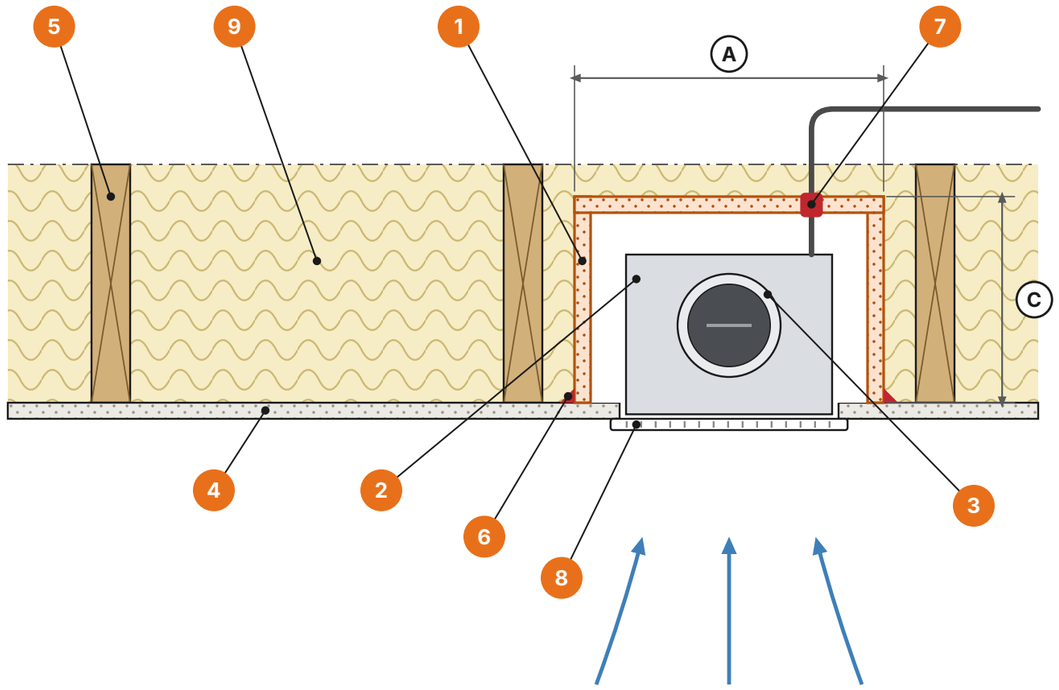
View from above the ceiling



Enclosure shown transparent for clarity. Front joist cut away.

2 SECTION A–A

Through the ceiling and enclosure, not to scale



Section cut through joists. Duct connection faces the viewer and runs along the joist bay.

KEYNOTES

1. **GMG Box Enclosure**
   Fire-rated drywall, 1 or 2 layers, 1/2 or 5/8 in
2. **Exhaust fan housing**
   Sits fully inside the enclosure
3. **Exhaust duct**
   Runs along the joist bay to the exterior
4. **Drywall ceiling**
   Part of the fire and smoke rated assembly
5. **Ceiling joists**
   Enclosure fits between framing
6. **Fire and smoke sealant**
   Continuous at enclosure-to-ceiling joint
7. **Sealed duct and cable penetrations**
   Firestop sealant at each opening
8. **Fan grille**
   Finished side, below ceiling
9. **Insulation**
   Held clear of the fixture by the enclosure

HOW IT WORKS

Cutting an exhaust fan into a rated ceiling leaves an opening above it. The enclosure caps that opening with drywall, so the ceiling keeps its fire and smoke separation around the fan.

A = width, B = depth, C = height (finished-side). Size to the fixture and verify the required rating with the authority having jurisdiction.

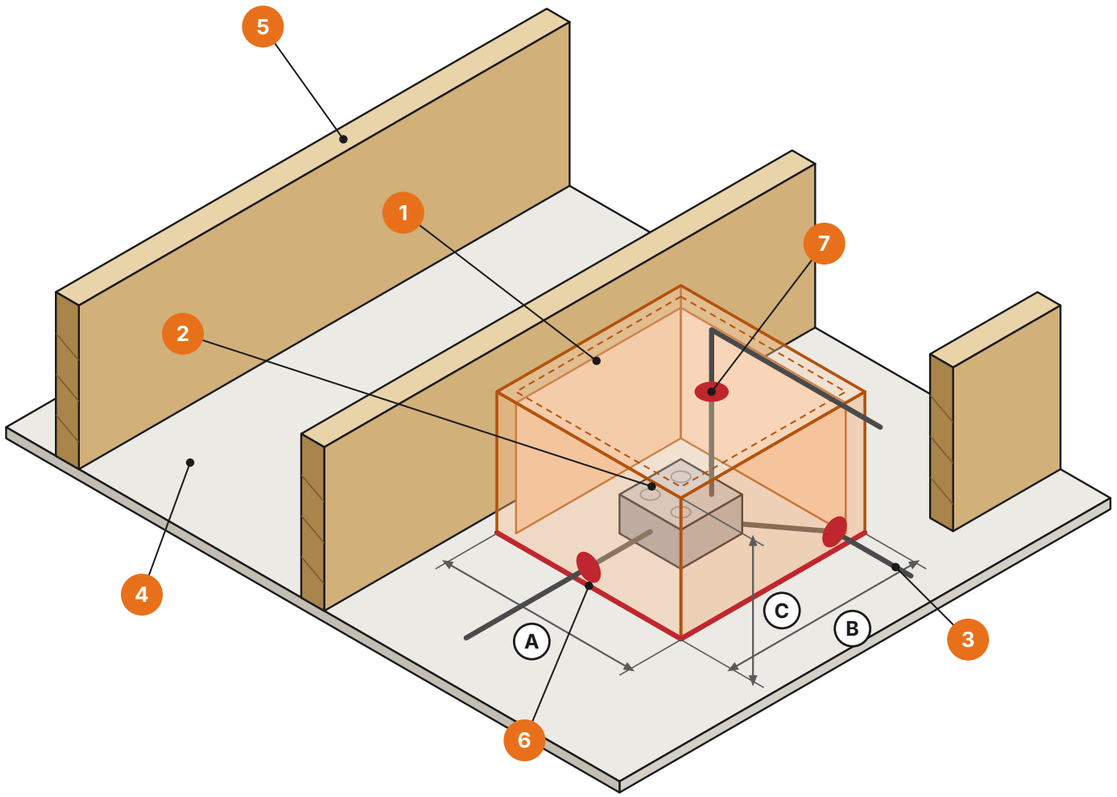
APPLICATION DETAIL

BOX ENCLOSURE · JUNCTION BOX

Fire and smoke rated drywall ceiling | Groove Manufacturing Group Inc.

1 ISOMETRIC CUTAWAY

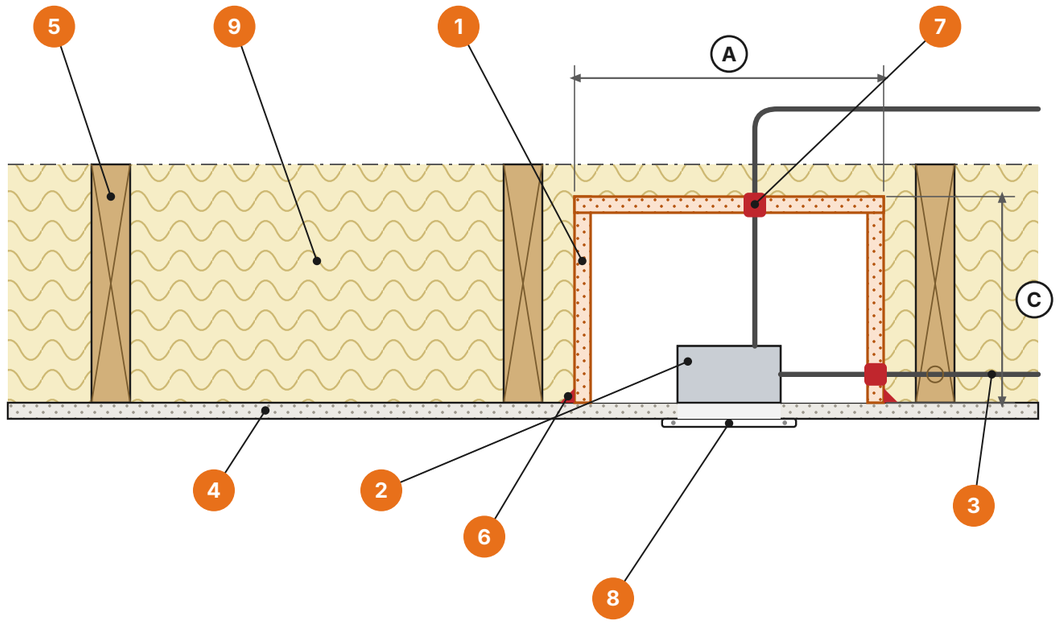
View from above the ceiling



Enclosure shown transparent for clarity. Front joist cut away.

2 SECTION A–A

Through the ceiling and enclosure, not to scale



Section cut through joists. Cable toward the viewer shown in the isometric only.

KEYNOTES

1. **GMG Box Enclosure**
   Fire-rated drywall, 1 or 2 layers, 1/2 or 5/8 in
2. **Junction box**
   Flush with ceiling, inside the enclosure
3. **Electrical cables**
   Enter through enclosure walls and lid
4. **Drywall ceiling**
   Part of the fire and smoke rated assembly
5. **Ceiling joists**
   Enclosure fits between framing
6. **Fire and smoke sealant**
   Continuous at enclosure-to-ceiling joint
7. **Sealed cable penetrations**
   Firestop sealant at every cable
8. **Cover plate**
   Accessible from below
9. **Insulation**
   Held clear of the fixture by the enclosure

HOW IT WORKS

A ceiling junction box leaves an opening in the rated ceiling. The enclosure caps it with drywall, so the ceiling keeps its fire and smoke separation while the box stays accessible from below.

A = width, B = depth, C = height (finished-side). Size to the fixture and verify the required rating with the authority having jurisdiction.

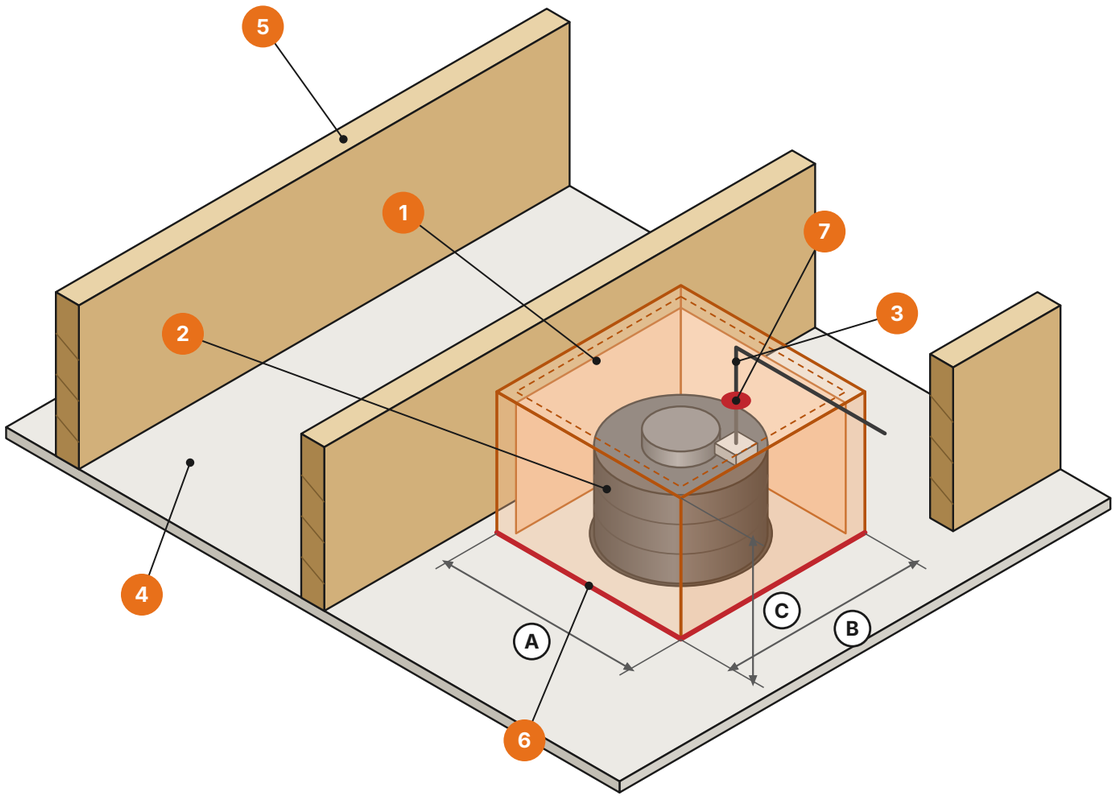
APPLICATION DETAIL

BOX ENCLOSURE · CEILING SPEAKER

Fire and smoke rated drywall ceiling | Groove Manufacturing Group Inc.

1 ISOMETRIC CUTAWAY

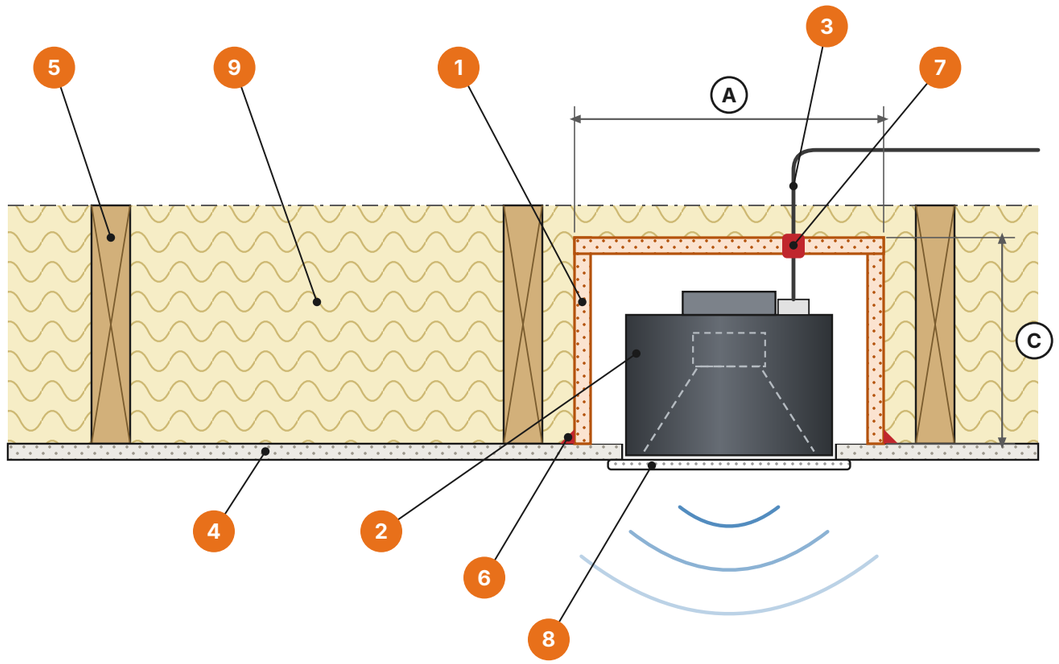
View from above the ceiling



Enclosure shown transparent for clarity. Front joist cut away.

2 SECTION A–A

Through the ceiling and enclosure, not to scale



Section cut through joists. Driver inside the back can shown dashed.

KEYNOTES

1. **GMG Box Enclosure**
   Fire-rated drywall, 1 or 2 layers, 1/2 or 5/8 in
2. **Speaker back can**
   Sits fully inside the enclosure
3. **Speaker wire**
   Low-voltage, enters through the lid
4. **Drywall ceiling**
   Part of the fire and smoke rated assembly
5. **Ceiling joists**
   Enclosure fits between framing
6. **Fire and smoke sealant**
   Continuous at enclosure-to-ceiling joint
7. **Sealed wire penetration**
   Firestop sealant around speaker wire
8. **Speaker grille**
   Finished side, below ceiling
9. **Insulation**
   Held clear of the fixture by the enclosure

HOW IT WORKS

Cutting a speaker into a rated ceiling leaves an opening above it. The enclosure caps that opening with drywall, so the ceiling keeps its fire and smoke separation around the speaker.

A = width, B = depth, C = height (finished-side). Size to the fixture and verify the required rating with the authority having jurisdiction.