## Proper Sizing, Spacing and Downlighting Techniques

## The components





#### The driver (A)

is what is recessed into the ceiling and consists of the electrical parts that bring power to the light.

#### The fixture (B & C)

is what's visible to people in the room and gives the light its aesthetic.



Fixtures and drivers are sized to correlate with one another and are sold together with all of our recessed lights. Panels. Spotlights. Downlights. Whatever you call recessed lights, they're some of the most versatile lighting options out there. The most common use of recessed lighting, and what we'll focus on here, is recessed downlighting from the ceiling.

## Installation type

What fixture you choose starts with knowing whether it will be used in a new construction, a remodel or as a retrofit.



#### **New construction**

Locations with visible ceiling joists and without drywall. Lights can be used with our rough-in plates **(D)** to help in the installation process.

#### Remodels

When the joists are not exposed or if you want to upgrade your current system to LED.

#### Retrofit

When an existing bulb is removed from the original housing, and replaced with an LED trim **(E)**.



Most of Dals' recessed fixtures are designed for new construction and remodels. These fixtures are installed through a small opening in the ceiling and held in place with clips.



A rough-in plate is designed for new construction or renovations where the ceiling framing is exposed. It allows for proper placement of your recessed light and is made from sturdy galvanized steel.

#### How to Choose Recessed Lighting

## How many downlights do I need?



# A simple method for estimating the number of downlights required is as follows:

Recessed downlights are generally positioned 2 to 3 ft. away from walls with a space of 3 to 4 feet between each light.

Dividing the ceiling height by two is a way of gauging how much space to leave between each downlight.

Thus, if your ceiling is 8 foot high, place your lights 4 feet apart.



In Canada, 4" recessed lights are the most popular, in the U.S., 6" are most commonly used.

## Notes on ratings

#### IC RATED



## IC Rated

("IC" stands for Insulation Contact) IC rating is essentially a measure used to determine if a recessed downlight is suitable to come into contact with your home's insulation or not.



### Wet rated

Wet-rated lighting fixtures are used in places with direct exposure to water (ex. inside the shower). Fixtures rated for wet locations use waterproof seals to protect their internal components from moisture. (example product: RGM4)



## Damp rated

Damp-rated lights are used in places that have some contact with moisture, but not in areas with constant or direct exposure to water. These lights do not have the same full seals as lights made for wet environments, but they're used in many situations around the home. You can use damp-location rated recessed lights to illuminate the area directly outside your shower. (example product: 2004-WH)



### Air tight

Airtight fixtures help keep air conditioning or heating from leaking out of the home through holes in the ceiling.

Look for these icons thoughout the catalog to find the product that's right for you.