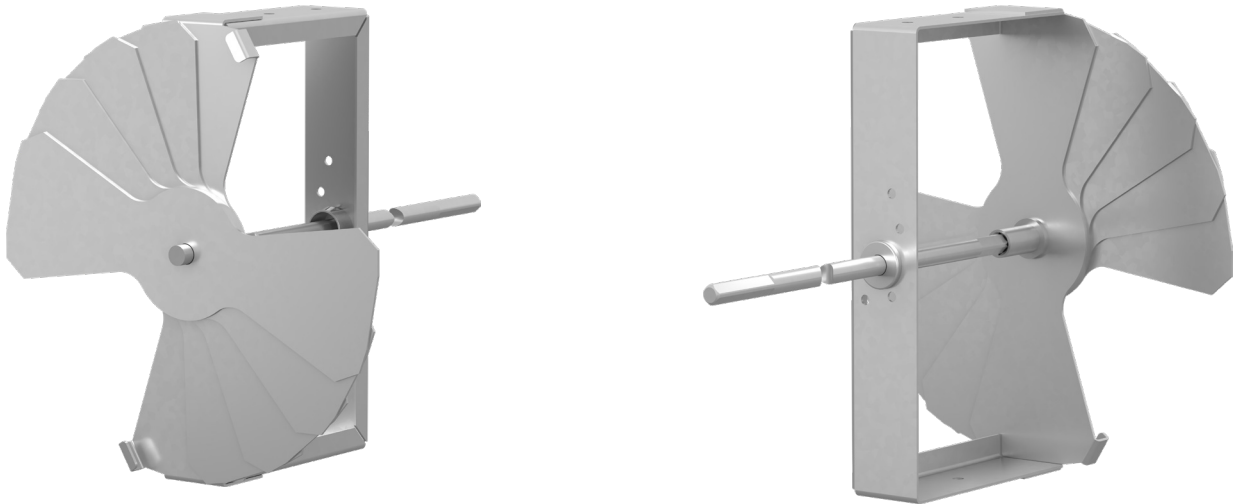


## Installation, Operation and Maintenance Manual

Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

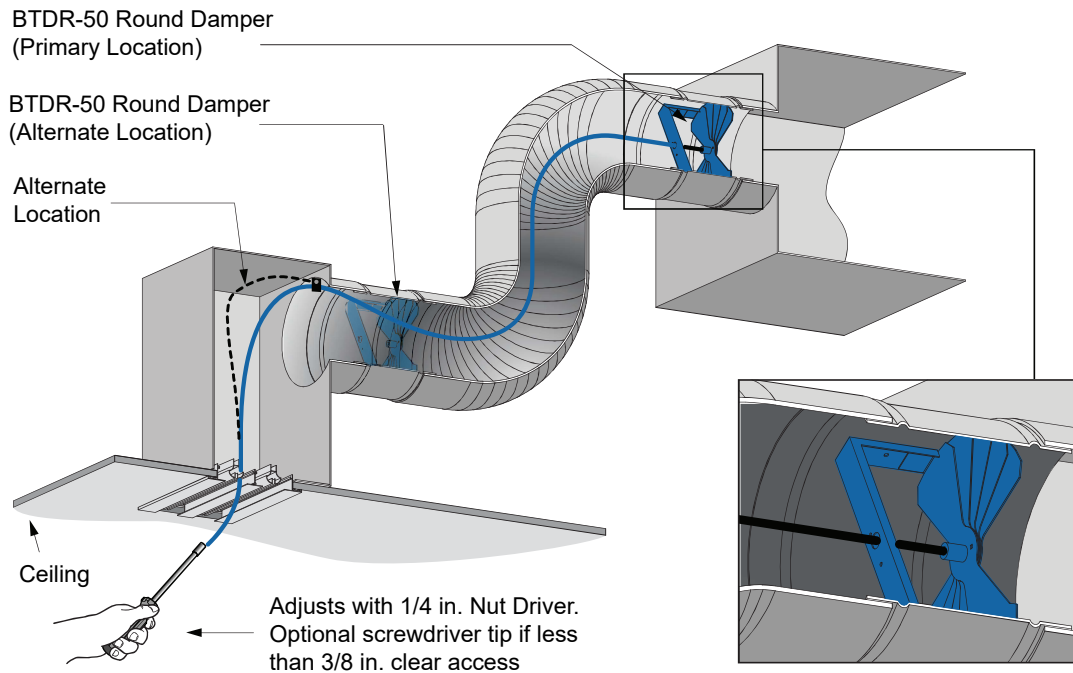


### Pre-Installation Guidelines

The basic intent of a proper installation is to secure the radial blade damper (bowtie) into the opening in such a manner as to prevent distortion and disruption of damper operation. The following items will aid in completing the damper installation in a timely and effective manner.

- 1) Check schedules for proper damper locations within the building. Visually inspect the damper for damage.
- 2) Lift or handle damper using bracket. Do not lift damper using blades. Do not drag, step on, apply excessive bending, twisting, or racking.
- 3) Damper must be installed into duct or opening free of twist or other misalignment. Damper must not be squeezed or stretched into duct or opening. Out of square, racked, twisted or misaligned installations can cause excessive leakage and/or torque requirements to exceed damper design.
- 5) Damper and cable operator must be kept clean, dry and protected from dirt, dust and other foreign materials prior to and after installation. Examples of such foreign materials include but are not limited to:
  - a) Mortar dust
  - b) Drywall dust
  - c) Firesafing materials
  - d) Wall texture
  - e) Paint overspray
- 6) Damper should be sufficiently covered as to prevent overspray if wall texturing or spray painting will be performed within 5 feet (1.50m) of the damper. Excessive dirt or foreign material deposits on damper can cause excessive leakage and/or torque requirements to exceed damper/actuator design.
- 7) ACCESS: Suitable access (maintenance, etc.) must be provided for damper inspection and servicing. Where it is not possible to achieve sufficient size access, it will be necessary to install a removable section of duct.
- 8) Applications where airflow could be uneven, such as a discharge fan, it is imperative to verify that at no point the maximum velocity exceeds the damper cataloged velocity.

# Instructions



1. Round dampers are furnished as one piece. Make sure the cable end is secure in damper coupling prior to installing.
2. Install the damper in the duct by rivet or #10 screw into the bearing bracket from outside the duct. A minimum of 1 screw per side. Make sure fasteners do not interfere with operation of the blades.
3. Position damper to allow best cable run, avoiding tight turns. Rotary cable shall be routed through the ductwork and plenum and terminated at the diffuser or grille face. Keep adjustment end of cable within 5 inches for accessible opening, if possible.
4. Secure the adjustment end of the cable using the nylon cable. The clamp may be positioned anywhere along the cable length to keep adjustment end accessible. Do not over tighten. Cable should rotate easily inside the clamp.
5. Use a 1/4 in. hex nut driver or screwdriver to adjust the blades.

## Our Commitment

*As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.*

Product warranties can be found online at [Greenheck.com](http://Greenheck.com), either on the specific product page or in the literature section of the website at [Greenheck.com/Resources/Library/Literature](http://Greenheck.com/Resources/Library/Literature).

