

grd accessories



















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GRD Accessories Products

air balancing devices pages: K7-K23 AG-85 AGR-35-AAS AG-95 (-AA) AG-45 AG-225

AIR BALANCING DEVICES

- Designed for quick access and easy adjustment
- Steel, aluminum or stainless steel material
- Engineered to minimize noise, turbulance and resistance



GRD Accessories Products (continued)

pages: K24-K26









PLASTER FRAMES

- · Can be installed as either surface mount or recessed
- Steel, aluminum or stainless steel construction

RAPID MOUNT • For use in plaster and sheet rock ceilings

- Lay-in style plaster frame that makes installation of GRD products simple and easy
- Extruded aluminum or steel construction
- Available in custom sizes

RAPID MOUNT

- For use in plaster and sheet rock ceilings
- Works with all Titus 24" x 24" lay-in type diffusers to a 30" x 30" lay-in module
- · Aluminum construction

page: K27

sectorizing baffle



SPECIAL APPLICATIONS

- Used to baffle one or more quadrants of the diffuser inlet to achieve a desired air pattern
- Steel construction



GRD Accessories Products (continued)

pages: K28-K29



FlexRight

FLEX DUCT INSTALLATIONS

- Designed to form flexible duct into highly efficient 90° elbow
- Improves airflow and saves energy by eliminating kinks and restrictions
- Works in retrofitting applications or new building construction
- Universal design fits flexible duct sizes 4" to 16"



RETURN AIR APPLICATIONS

- An acoustical return sound boot that eliminates sound transfer in open plenum ceilings
- Available in two flex duct diameters 10" & 16"





Overview

Effective air balancing begins with the balancing provisions that are designed into the HVAC system and Titus offers a complete line of GRD accessories to meet these requirements. Titus air balancing devices are available in several nominal sizes and can be mounted directly to the diffuser inlet or duct mounted. They feature high quality, precision construction and can be ordered as accessories with the diffuser or grille, or as stand alone units.

- · Easy to select and specify
- Designed for quick access and adjustment
- Accurate, smooth and predictable in their response to adjustment
- · Engineered for the least possible noise, turbulence and air resistance

Mounting and installation accessories provide solutions to enable the installation process to be faster and solve potential challenges should they arise.

- · Designed to compliment aesthetics
- Provide transitions between rough-in and finish out
- · Enhance performance













baffle



mounting frames



duct accessories



energy solutions

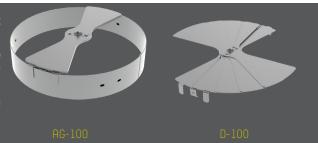




Air Balancing Devices

AG-100 / D-100

- Gang operated radial blades slide, each blade over the next, at right angles to the airflow
- Model AG-100 is separately mounted in the duct, just above the diffuser. Adjusts with a screwdriver from the face side of the diffuser.
- Model D-100 is the same as AG-100, but without the mounting ring. Mounts directly on the diffuser neck, flush with the top. Useful in flex duct or where height is limited.
- Galvanized steel material





metric sizes

air balancing

AVAILABLE MODELS:

AG-100 D-100

FINISH

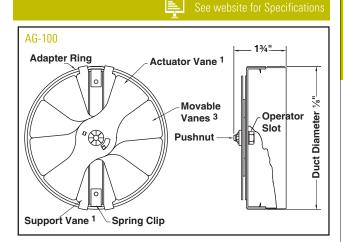
Standard Finish - #04 Mill

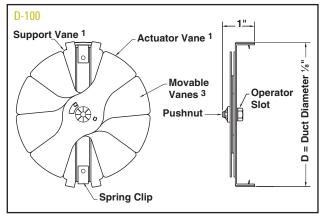
OVERVIEW

Round Dampers (Sliding Doors)

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.

Note: For 6", 8", 10", 12" and 14" Round Necks





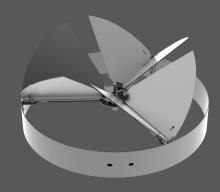
4G-100 / D-100





AG-75

- Gang operated opposed blades (three sets on sizes 6 through 12 inches, four sets on 14 though 20 inches and six sets on 24 through 36 inches). Can be mounted directly into hard duct above diffuser neck. The damper can be easily adjusted from the face side of the diffuser.
- Not recommended for use with flexible duct
- Steel material



AG-75



air balancing

AVAILABLE MODEL:

AG-75

FINISH

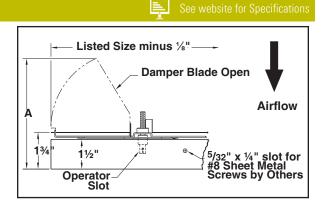
Standard Finish - #84 Black

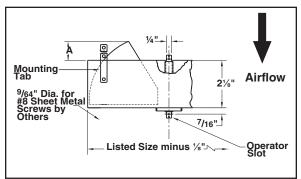
OVERVIEW

Opposed Blade

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.

Note: The photograph represents sizes 14" and larger





Nominal Size	Α
6	4 ¹ /8
7	41/2
8	5
10	5 ⁷ /8
12	63/4

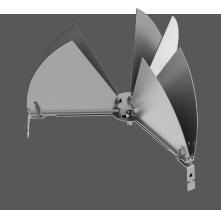
Nominal Size	Α
14	3
15	31/4
16	35/8
18	43/8

Nominal Size	A
20	5
24	37/8
30	5 ³ /8
36	7



D-75

- Mounts directly to the diffuser neck. Three sets of gang operated opposed blades distribute air evenly over the diffuser face. Quickly, easily adjusted from the face side of the diffuser.
- · Galvanized steel material



D-75



ir balancing

AVAILABLE MODEL:

D-75

FINISH

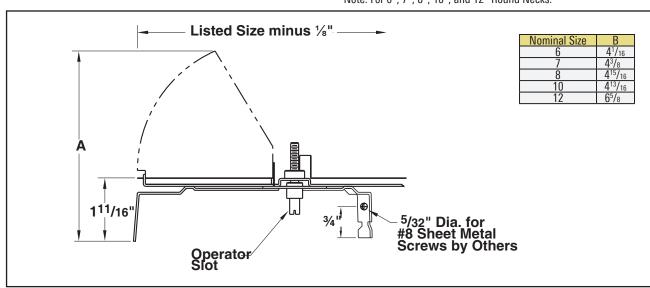
Standard Finish - #04 Mill

OVERVIEW

Opposed Blade

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.

Note: For 6", 7", 8", 10", and 12" Round Necks.





AG-85

- A low cost damper for volume control in round neck diffusers.
 Continuously adjustable. Friction pivots hold the heavy gauge blades at the desired setting. Quickly, easily adjusted from the face side of the diffuser.
- Not recommended for use with flexible duct
- Steel material



AG-85



air balancing

AVAILABLE MODEL:

AG-85 / Duct Mounted

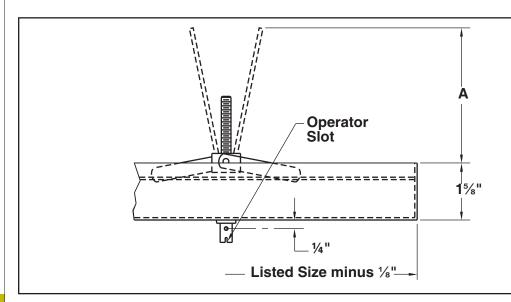
FINISH

Standard Finish - #84 Black

OVERVIEW

Butterfly

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.



Nominal Size	Α
4	1 ⁷ / ₁₆
5	1 ¹⁵ / ₁₆
6	2 ⁷ /16
7	215/16
8	37/16
10	4 ⁷ / ₁₆
12	5 ⁷ / ₁₆
14	6 ⁷ /16
15	615/16
16	7 ⁷ /16
18	87/16
20	97/16
24	11 ⁷ / ₁₆

K10



AG-15

- Neck mounted
- Uses steel s-clips for easy mounting and removal
- Steel and 304 Stainless Steel models are slot operated
- Aluminum model is lever operated



AG-15





metric sizes

air balancing

AVAILABLE MODELS:

AG-15 / Galvanized Steel AG-15-AA / Aluminum AG-15-SS / 304 Stainless Steel

FINISH

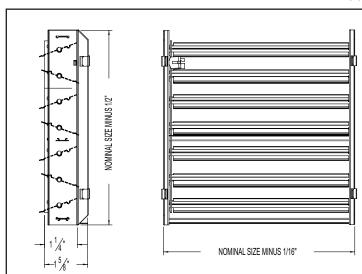
Standard Finish - #04 Mill

OVERVIEW

Square & Rectangular Dampers / Opposed Blade

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.

Note: Available only for 300/350 Series, 50F, 8R and 8F models



Note: Available in one piece construction up to 24" \times 18". Large sizes are made in multiple sections up to 48" \times 48".



AG-15-HD

- Neck mounted
- Uses steel s-clips for easy mounting and removal
- Designed to fit drum louver (DL) models only



AG-15-HI



air balancing



AG-15-HD / Steel / Heavy Duty Neck-Mounted

FINISH

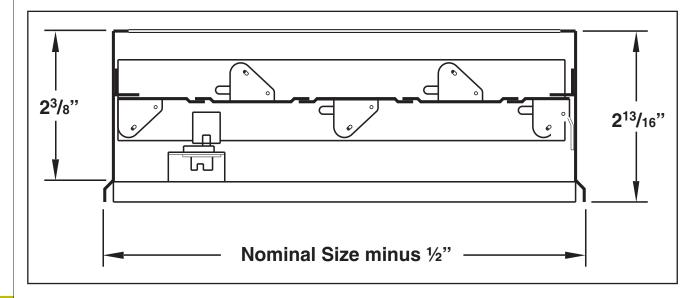
Standard Finish - #04 Mill



See website for Specifications

OVERVIEW

Opposed Blade





AG-35

- Gang-operated opposed blades meter air volume precisely with minimum air disturbance
- Model AG-35 installs in the duct immediately behind the diffuser
- Model AG-35B installs in the duct, separated from the diffuser
- Model numbers with the suffix AA denote aluminum construction with miscellaneous steel parts
- Available Operators:
 - #1 Slot Operated (Supply)
 - #8 Slide (lever)
 - Operated (Return)



AG-35





metric sizes

air balancing

AVAILABLE MODELS:

AG-35 / Steel / Neck Mounted AG-35-AA / Aluminum / Neck Mounted AG-35B / Steel / Duct Mounted AG-35B-AA / Aluminum / Duct Mounted

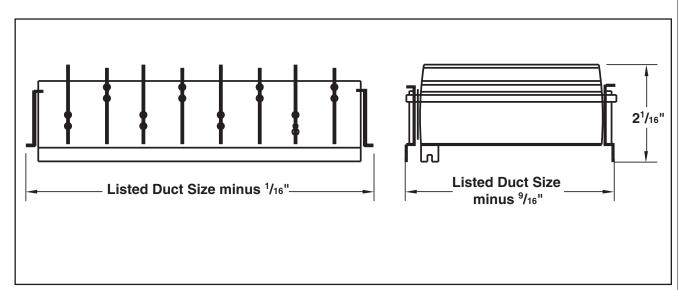
FINISH

Standard Finish - #04 Mill

OVERVIEW

Opposed Blade

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.



Note: Available in one piece construction up to 30" x 12". Large sizes are made in multiple sections up to 48 x 48 inches.





AGR-35-AAS

- Model AGR-35-AA-S is a remote cable-operated damper for ductmounted applications, separate from the diffuser
- Gang-operated opposed blades meter air volume precisely with minimal air disturbance
- Constructed of heavy-duty extruded aluminum with miscellaneous steel parts
- Cable available in lengths of 2 feet through 12 feet in 1 foot increments
- Cable assembly shipped loose for field installation
- Dampers require one to three cables for operation based on width.
 Sizes 6 to 16 inches require one cable, 18 to 32 inches require two cables, and 34 to 48 inches require three cables.



AGR-35-AAS



air balancing

AVAILABLE MODEL:

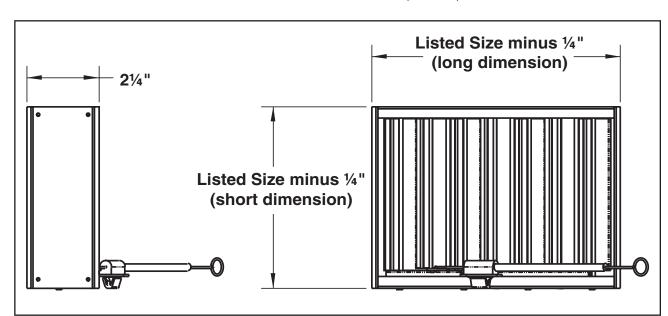
AGR-35-AAS

FINISH

Standard Finish - #04 Mill

OVERVIEW

Opposed Blade / Remote Cable Operated





AG-95 / AG-95-AA

- For use with all Titus Series TDC louvered diffusers, as well as with all perforated diffusers having square or rectangular necks
- The blades distribute air evenly over the diffuser neck opening, in addition to regulating the airflow accurately. An operating lever is accessible from the face side of the diffuser.
- Attaches quickly with sheet metal screws directly to the diffuser neck (screws provided by others)
- Also available with a slot operator for use with Titus TDV and TDX model diffusers



AG-95. AG-95-AA



r balancing

AVAILABLE MODELS:

AG-95 / Steel AG-95-AA / Aluminum

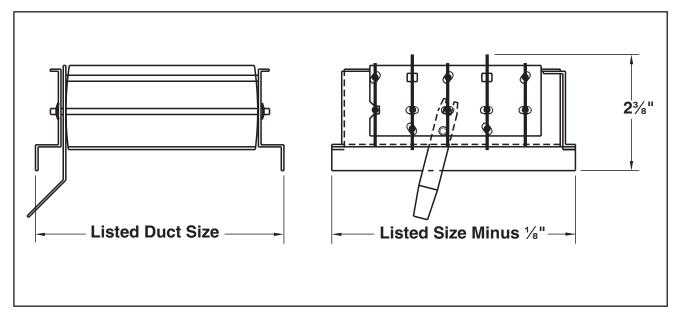
FINISH

Standard Finish - #84 Black

OVERVIEW

Opposed Blade

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.



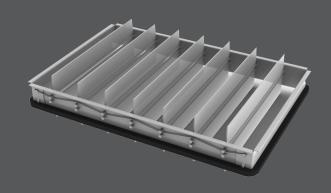
AG-95 / AG-95-AA





AG-125

- Two sets of independently adjustable blades in one damper. The airentering set deflects air from the main duct into the take-off. The air leaving the unit equalizes airflow into the diffuser.
- A suffix "S" on the model number denotes blades parallel to the short dimension, "L" denotes blades parallel to the long dimension
- Extruded aluminum blades, steel frame



AG-125



ir balancing

AVAILABLE MODEL:

AG-125

FINISH

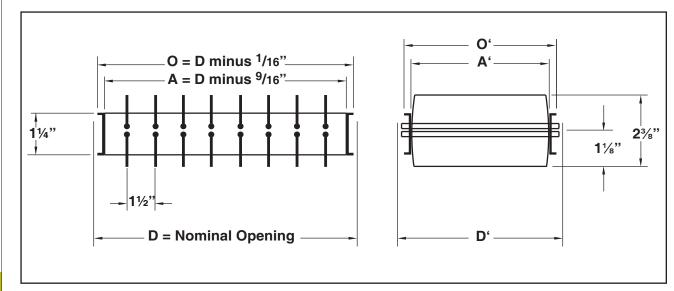
Standard Finish - #04 Mill

OVERVIEW

Double Blade

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.

Note: Model AG-125 is for TDC diffusers only





AG-65

- Quickly installed with sheet metal screws flush with entrance to the branch take-off. The damper blade opens upstream in the main duct to catch the air and divert it into the take-off.
- Individually adjustable vanes with friction pivots equalize velocities entering the diffuser neck
- Nominal Sizes: 4, 5, 6, 7, 8, 10, 12, 14, 15, 16, 18, 20, 24, 30, 36



AG-65





metric sizes

air balancing

AVAILABLE MODEL:

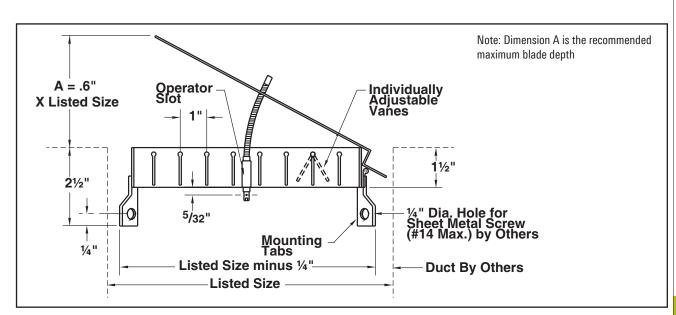
AG-65 / For Round Necks

FINISHES

Standard Finish - #84 Black Optional Finish - #04 Mill

OVERVIEW

Damper with Grid





AG-65 (S, L)

- Quickly installed with sheet metal screws flush with the entrance to the branch take-off (screws by others.) The damper blade opens upstream in the main duct to catch the air and divert it into the takeoff
- Individually adjustable vanes with friction pivots equalize velocities entering the diffuser neck
- The suffix "S" or "L" denotes vanes parallel to the short or long dimension. Maximum length/width ratio is 2:1. Maximum size is 30 x 30 inches.



AG-65 (S, L)



air balancing

AVAILABLE MODELS:

AG-65-S

AG-65-L / For Square & Rectangular Necks

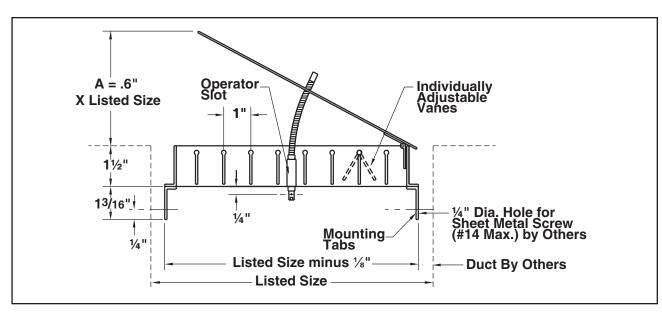
FINISHES

Standard Finish - #84 Black Optional Finish - #04 Mill



Damper with Grid







EG

- Equalizes the airflow into the branch duct or diffuser neck. Also gives directional control of airflow. Specially designed Titus airfoil vanes give maximum control with minimum noise and turbulence. The vanes are individually adjustable, with friction pivots to hold the desired settings.
- For nominal round duct sizes 4 through 36 inches





balancing

AVAILABLE MODEL:

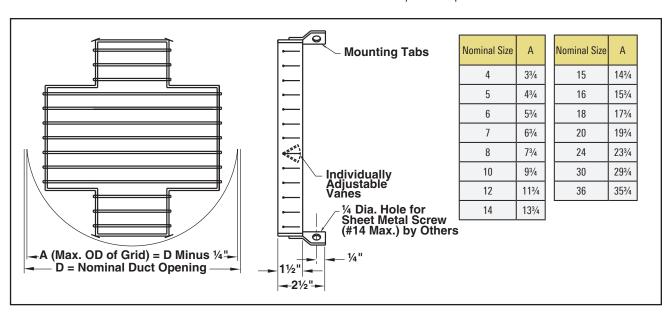
EG / For Round Necks

FINISHES

Standard Finish - #84 Black Optional Finish - #04 Mill

OVERVIEW

Equilizing Grid







EG (S, L)

- Equalizes the airflow into the branch duct or diffuser neck. Also gives directional control of airflow. Specially designed Titus airfoil vanes give maximum control with minimum noise and turbulence.
- The vanes are individually adjustable, with friction pivots to hold the desired settings
- The suffix "S" or "L" denotes vanes parallel to the short or long dimension



EG (S. L



air balancing

AVAILABLE MODELS:

EG-S

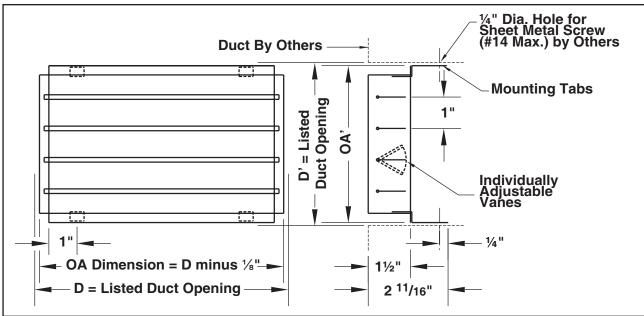
EG-L / For Square & Rectangular Necks

FINISHES

Standard Finish - #84 Black Optional Finish - #04 Mill

OVERVIEW

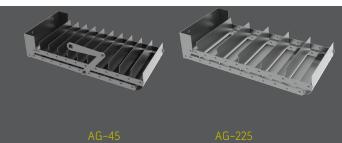
Equilizing Grid





AG-45 / AG-225

- Gang-operated parallel vanes are fully adjustable from open to closed. The carefully designed vane cross-section minimizes pressure drop and turbulence. The extractor provides uniform air distribution across the stub duct or diffuser neck.
- Factory assembled, installs easily with two sheet metal screws (screws by others.) Choice of three operators as illustrated below. Maximum recommended size is 36 x 12 inches. Maximum duct velocity is 2500 fpm.







AVAILABLE MODELS:

AG-45 / 1" Spacing AG-225 / 2" Spacing

FINISH

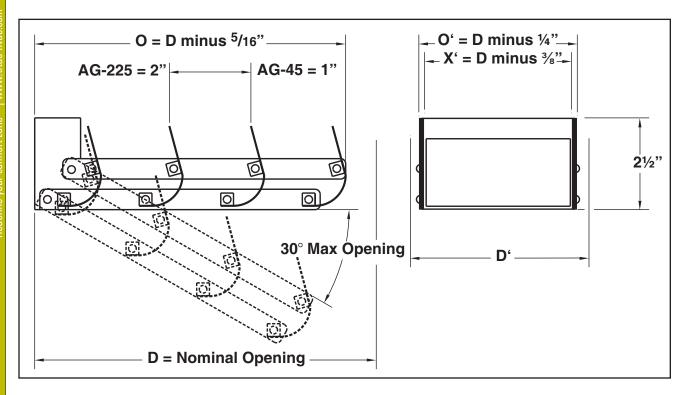
Standard Finish - #04 Mill

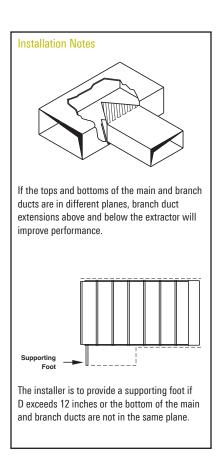
OVERVIEW

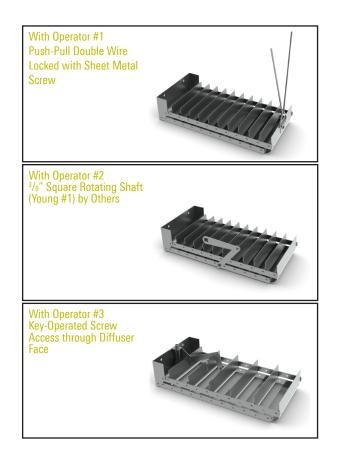
Volume Extractors

Effective air balancing begins with the balancing provisions that are designed into the HVAC system. Titus balancing devices are easy to select and specify. They are designed for quick access and adjustment and are engineered for the least possible noise, turbulence and air resistance. Titus makes available published flow factors for all Titus diffusers. This allows precision balancing to be performed in the field with accuracy based on prior test results.

AG-45 / AG-225









TV

- Fixed vanes deflect the air in a curved path with minimum pressure drop
- Provides uniform air distribution across the stub duct or diffuser neck
- Can be set at the desired angle and locked in position with adjusting wires under screw heads
- Furnished in sizes to fit standard diffuser necks or stub ducts.
 Specify the size required.





ir balancing

AVAILABLE MODEL:

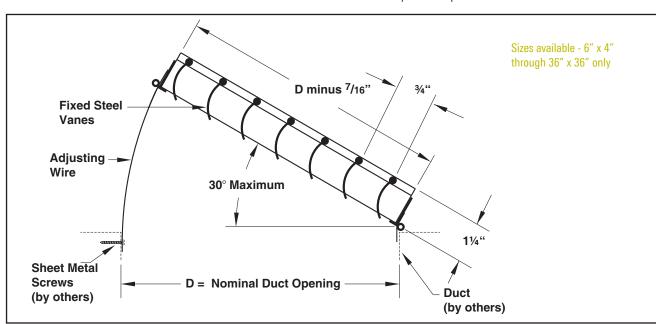
TV / Steel / For Square & Rectangular Necks

FINISHES

Standard Finish - #26 White Optional Finish - #04 Mill

OVERVIEW

Turning Vanes





Mounting Frames

TRM / TRM-S

- Model TRM Titus Rapid Mount Frame allows T-bar, lay-in type diffusers (border Type 3) to be installed in surface mounting applications (border Type 1)
- TRM frame is installed in opening and secured in place using security clips. Screws are mounted flush in frame mounting holes.
- Rapid Mount Frame can be mounted in plaster or sheet rock ceiling
- The TRM can be used to access ceiling plenum. Diffuser with flex connection can be lifted out of frame to access ceiling space.
- Material is aluminum with steel fasteners



TRM / TRM-S



mounting frame

AVAILABLE MODELS:

TRM / Aluminum TRM-S / Steel

FINISHES

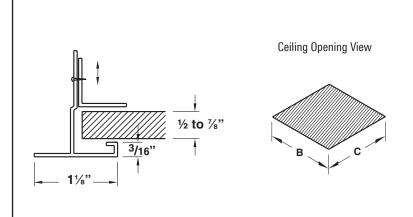
Standard Finish - #26 White Optional Finishes - #01 Aluminum / #04 Mill

OVERVIEW

Rapid Mount

Titus mounting frames make installation of grilles, diffusers and other ceiling components in plaster and sheet rock ceilings as simple as inserting them in a standard T-bar type ceiling. For typical applications, the frame has adjustable fastening clips which adapt to a variety of plaster and sheet rock ceiling thicknesses.

Note: For plaster and sheet rock ceilings



Update available module sizes and dimensions per submittal update

*Check actual dimensions of ceiling opening before installation





Mounting Frames (continued)

TDRM

- The TDRM allows T-bar, lay-in type diffusers (border type 3) to be installed in 30 x 30 ceiling tees
- Can be used with all Titus diffusers that are 24 x 24 lay-in type
- Can be used to access ceiling plenum. Diffuser with flex connection can be lifted out of frame to access ceiling space.



TDRM



mounting fra

AVAILABLE MODEL:

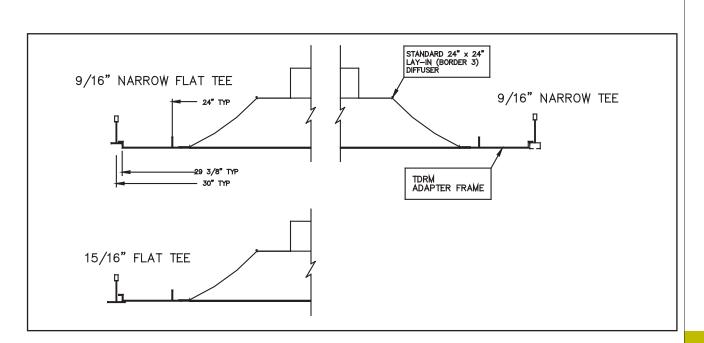
TDRM / Aluminum

FINISHES

Standard Finish - #26 White Optional Finish - #01 Aluminum / #04 Mill

OVERVIEW

Titus mounting frames make installation of grilles, diffusers and other ceiling components in plaster and sheet rock ceilings as simple as inserting them in a standard T-bar type ceiling. For typical applications, the frame has adjustable fastening clips which adapt to a variety of plaster and sheet rock ceiling thicknesses.

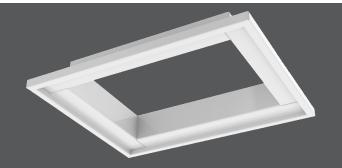




Mounting Frames (continued)

PF / PFA / PF-SS

- Not available in sizes over 48 inches in either dimension.
- Wall opening should be listed duct size plus 1/8" to listed duct size plus 1/4".
- Models PF, PFA, and PF-SS can be installed as either surface mount or recessed.



PF / PFA / PF-S



mounting frame



PF / Steel PFA / Aluminum PF-SS / 304 Stainless Steel

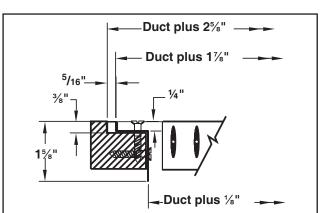
FINISHES

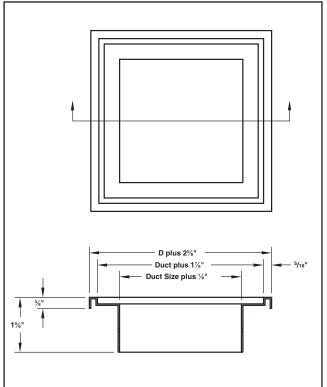
Standard Finish - #26 White Optional Finish - #01 Aluminum / #04 Mill

OVERVIEW

Plaster Frames

Titus mounting frames make installation of grilles, diffusers and other ceiling components in plaster and sheet rock ceilings as simple as inserting them in a standard T-bar type ceiling. For typical applications, the frame has adjustable fastening clips which adapt to a variety of plaster and sheet rock ceiling thicknesses.





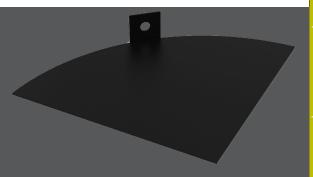
All dimensions are in inches



Sectorizing Baffle

SB

- For special applications, where it is necessary to baffle one or more quadrants of the diffuser inlet to achieve a desired air pattern.
- Furnished in multiples of 90° to fit most round neck diffusers.
- Steel, painted black.
- Shipped loose for field installation by others.



SB



baffle

AVAILABLE MODEL:

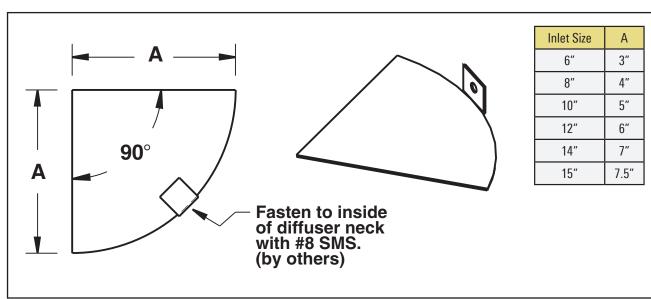
SB

FINISH

Standard Finish - #84 Black

OVERVIEW

Titus Sectorizing Baffle is designed for special applications, where it is necessary to baffle one or more quadrants of the diffuser inlet to achieve a desired air pattern. Baffles are furnished in multiples of 90 degrees to fit most round neck diffusers.





Duct Accessories

FlexRight

- FlexRight is a radius forming brace designed to form flexible duct into highly efficient 90° elbows
- · FlexRight improves airflow and saves energy by eliminating kinks and restrictions common to flexible duct installations
- Great for retrofit applications or new building construction
- Green product that saves energy by improving airflow
- Made from 100% recycled material (copolymer polypropylene)
- Universal design fits flexible duct sizes: 4" 16"
- UL Listed
- Nylon cable ties supplied by others







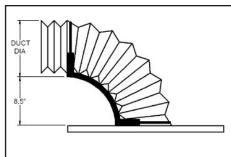
AVAILABLE MODEL:

FlexRight

OVERVIEW

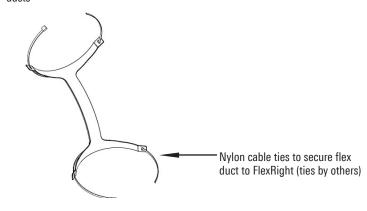
FlexRight is made of 100% recycled materials, is UL listed and saves energy by reducing pressure loss through the duct work. The universal design accommodates all flexible duct sizes and diffuser inlets from 4" to 16". It provides a less expensive alternative to hard duct transitions and is easy to transport and install. With its simple and universal design, FlexRight is a great choice for both new construction and retrofit applications.

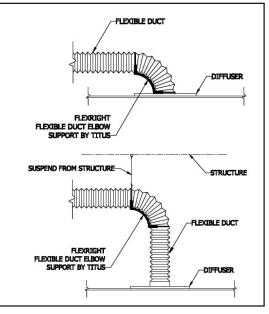




FlexRight 90° Elbow

Universal-mount, 1 piece, fully adjustable, radius-forming brace to support 4" (102-mm) through 16" (406-mm) diameter flexible air ducts







Duct Accessories (continued)

FlexaBoot

- · FlexaBoot is an acoustical return sound boot
- Designed for ceiling plenum return air applications
- Eliminates sound transfer in open plenum ceilings
- Acoustically tested assembly consists of flex duct, FlexRight, assembly ties & mounting straps
- Available in two flex duct diameters: 10" & 16"
- Square to round adapters by others



FlexaBoo



luct accessori

AVAILABLE MODEL:

FlexaBoot

OVERVIEW

The noise criteria (NC) factor for return air outlets is a major concern that is often overlooked in buildings such as medical offices, schools, and executive offices where privacy is vital. Titus offers an acoustical return sound boot that is inexpensive, lightweight, and easy to install. The FlexaBoot assembly consists of a 5'piece of acoustical flex duct, a FlexRight elbow, and all necessary hardware for installation.



10" Diameter - flexible duct length is 60"

Temperature Range: 0° to 200°F

16" Diameter - flexible duct length is 72"

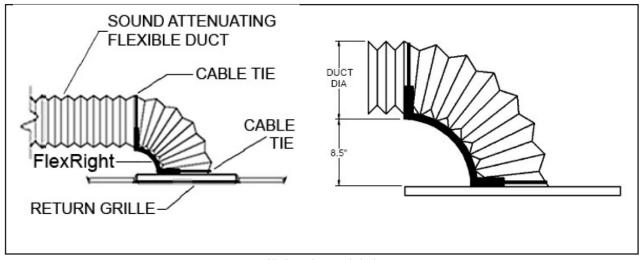
Rated Velocity: 5000FPM

Maximum Rated Pressure (Negative)

1.0" (for 10" diameter size)

1.2" (for 16" diameter size)

Note: Pressure is in inches of WG





Notes

