# BYPASS TERMINAL UNIT

BPS



**BPS** 

## **BASIC FEATURES**

The BPS, bypass air terminal, features a primary inlet, a discharge outlet, a bypass outlet, and an internal diverting damper. BPS bypass air terminals are lined with insulation to provide sound absorption and thermal resistance.

## OPERATING PRINCIPLE

The BPS bypass air terminal operates on the principle that as the space cooling load is satisfied, the internal damper diverts air flow from the discharge outlet to the bypass outlet to achieve a constant space temperature. The bypass outlet is typically connected to the return system so that the diverted conditioned air is not wasted. As the space cooling load is further satisfied, the BPS controls the primary air to preset minimum flow determined by the minimum level of ventilation required in the space. In addition, the BPS can be used in full bypass mode for applications where minimum ventilation requirements are not necessary.

#### SOUND

The goal in designing VAV systems is to operate air terminals at low pressures and air flows, while still satisfying the design conditions. The BPS bypass air terminal is designed to minimize sound generation.

#### **APPLICATIONS**

The basic BPS bypass air terminal is designed for interior zones where no reheat is required.

# **FEATURES**

- A wide variety of sizes (7) result in a total flow range from 0 to 4400 CFM
- 20 gauge galvanized steel casing construction.
- Industry standard round inlet, discharge, and bypass collars sized to accept either flexible or rigid duct connections
- Internal lining meets or exceeds the safety and erosion requirements of standard UL 181 and NFPA 90A.
- Damper blade is made with heavy gauge galvanized steel, resulting in a heavy-duty construction for stable operation
- 1/2" dual density fiberglass insulation

## **OPTIONS**

- BPS bypass air terminals can be furnished without controls, with electronic analog controls, or with pneumatic controls
- Multi-outlet Plenum
- Manual Inlet Damper
- Multi-outlet Damper
- Manual Bypass Damper
- Manual Outlet Damper
- Hanger brackets



