

# JUNCTION BOXES



## **Efficient and Effective Transfer of Stormwater**

Junction Boxes

In stormwater management, a Junction Box serves as a connection point for multiple pipes within a stormwater system. Its primary function is to facilitate the efficient and effective transfer of stormwater from one pipe to another, or from one drainage area to another.

Typically located underground, ParkUSA junction boxes are constructed with durable precast concrete, which can withstand the weight of surrounding soil and the pressure of stormwater flow. They are designed with multiple inlet and outlet pipes that connect to the surrounding stormwater system.

Junction boxes aid in preventing flooding and erosion by directing the flow of stormwater away from sensitive areas and into appropriate drainage channels. They are commonly used in commercial and residential developments to manage stormwater runoff from rooftops, driveways, and other impervious surfaces. Junction boxes streamline the design and construction of stormwater systems, enhancing their efficiency and costeffectiveness.

### **Applications**

Stormwater management • Drainage systems • Stormwater retention and treatment

#### **Advantages**

- City and state models and sizes available for quick shipment
- Consistent quality and dimensional accuracy ensured with factory production
- Quick installation process and interchangeable sections for field flexibility
- Pollution control options include debris inserts, oil dams, oil-stop valves, and backflow prevention
- Cast iron, ductile iron, galvanized steel, ADA, or heel-proof grate options
- Durable precast concrete provides strength and long-lasting performance
- Supports surface load-bearing capacity
- · Built to ASTM Standard



Saddle Gate Model



Model JBTA







#### **How It Works**

Junction boxes are used to collect and manage stormwater runoff from impervious surfaces like roadways and parking lots. Inlet pipes direct stormwater to the junction box where it is temporarily stored before being safely discharged into the drainage system. Our junction boxes can also improve water quality by filtering out debris and pollutants from runoff. Periodic maintenance is performed to remove captured materials and prevent blockages.

#### **System Components**

Base and Walls: The base of the precast concrete junction box is the bottom section that supports the entire structure, while the walls enclose the structure. Each unit is designed to provide stability and prevent shifting or movement over time.

**Surface Cover:** The opening at the top allows for safe inspection and entry into the structure. Its removable cover or hatchway supports pedestrian or vehicular traffic and is commonly made of cast iron, steel, aluminum, or composite materials.

**Inlets and Outlets:** Openings in the sides of the structure where the collected water enters and exits via pipe connections.

Pipe Connections: Junction boxes contain thin wall knockouts or cast sleeves for various pipe connections that allow them to be connected to a network of underground pipes. These connections allow the collected water to be conveyed to a discharge point, such as a stream, river, or other water body. The connections are sealed with cementitious grout or flexible boots to ensure watertightness and maintain hydraulic efficiency.



Full product catalog available at request.parkusa.com





