



PRECAST BOX CULVERTS

PRODUCTS



GROUNDED IN STRENGTH

The ideal solution when circular pipe won't do.

In situations where circular pipe can't provide the required flow capacity or space constraints exist, precast box sections offer an ideal solution. They also represent a superior alternative to cast-in-place box culverts, long span metal arches, short bridges, and multi-barrel circular culverts or drains.

Applications

Precast box sections are routinely used for the following:

- highway culverts
- railroad culverts
- short span highway bridges
- storm drains
- underground stormwater retention structures
- livestock, pedestrian or golf cart undercrossings
- utility tunnels
- groundwater recharge systems
- to replace existing open channels or ditches, and enable land to be used more productively
- jacked or tunneled installations

Sizes

Precast box sections are normally available in spans of 3 ft (0.914m) through 20 ft (3.6m) with a variety of rises.

Joints

Precast box sections are produced with tongue and groove joints. Numerous sealants and methods of sealing are available, depending on application and requirements.

Applicable Specifications

The following specifications apply to precast box sections:

- ASTM C1433 – standard specification for precast reinforced concrete box sections for culverts, storm drains and sewers
- AASHTO M259 – precast reinforced concrete box sections for culverts, storm drains and sewers
- AASHTO M273 – precast reinforced concrete box sections for culverts, storm drains, and sewers with less than 2 ft of cover subjected to highway loadings
- ASTM C1577 – precast reinforced concrete box sections for culverts, storm drains, and sewers designed according to AASHTO LRFD
- various state DOTs
- OPSS 1821 – Ontario Provincial standard specification 1821, material specification for precast reinforced concrete box culverts and box sewers

