

## Precast Reinforced Concrete Box Culvert

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### CXT Incorporated

Lebanon TN	NPCA certified
Hillsboro TX	NPCA certified

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### Industrial Precast Inc.

Fort Smith AR	NPCA certified
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### Rinker Materials

Como MS	ARCPA certified
West Memphis AR	ACPA certified
Alexandria LA	ACPA certified
Prentiss MS	ACPA certified

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### Scurlock Industries

Fayetteville AR	ARCPA certified
Jonesboro AR	ARCPA certified
Springfield MO	ACPA certified
Miami OK	ARCPA certified

The above manufacturers currently have on file a letter of agreement with the Arkansas Department of Transportation (ARDOT) to furnish precast reinforced concrete box culverts in accordance with ARDOT Standard Specifications and referenced AASHTO Specifications. As part of the letter of agreement, manufacturers will agree to waive confidentiality of Certifier audits, so that audits can be sent to ARDOT for review. Above manufacturers are ACPA Certified unless noted otherwise.

### Method of Documentation of Acceptance:

As part of acceptance requirements on Department projects, precast reinforced concrete box culverts shall be required to have a Certificate of Delivery furnished by the manufacturer to the Resident Engineer. Each piece shall bear a National Precast Concrete Association (NPCA) certified seal or an American Concrete Pipe Association (ACPA) stamp; the cast date, and manufacturer's identification. The Project Engineer shall verify the products as delivered, per Inspector's Manual and AASHTO R 73, as modified by any applicable ARDOT Specifications. Examples of items to review are the quantity, dimensions, squareness, concrete defects, adequacy of reinforcing steel cover, and presence of certifier's stamp and cast date on each piece. Non-conforming pieces will be rejected unless a Department- approved remediation is performed and deemed by the Engineer to be successful.

### Method of Approval:

#### CERTIFICATION ACCEPTANCE PROCEDURE AGREEMENT FOR PRECAST REINFORCED CONCRETE BOX CULVERTS

Precast reinforced box culverts will be evaluated by the Arkansas Department of Transportation based on the following requirements for certification and inspection:

- The manufacturing plant shall be certified for the specific products to be furnished under this

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agreement by the National Precast Concrete Association (NPCA) Plant Certification Program or by the American Concrete Pipe Association's (ACPA) "Quality Cast" Plant Certification Program.

- The following will also apply for products containing iron or steel:  
All iron and steel material used on Department projects must comply with the "Buy America" requirements and the Department's "Standard Specifications for Highway Construction", Subsection 106.01. This means all manufacturing processes of iron and steel in a product (i.e., smelting/remelting and any subsequent process which alters the steel material's physical form or shape or changes its chemical composition) must occur within the United States to be considered of domestic origin. This includes processes such as rolling, extruding, machining, bending, grinding, drilling, and applying coatings. The use of pig iron or processed, pelletized and reduced iron ore manufactured outside of the United States is permitted in the domestic manufacturing process for steel and/or iron materials. All steel and iron mill test reports must include a certified statement that all manufacturing processes for the iron or steel product occurred in the United States. Each supplier/fabricator of an intermediate product will also certify that the product complies with the "Buy America" requirements.
- The manufacturer shall furnish a Certificate of Delivery for each Shipment, stating that the listed materials have been tested, inspected, approved and stamped in accordance with the NPCA Plant Certification Program or the ACPA "Quality Cast" Plant Certification Program and that the products conform to the latest ARDOT Construction Specifications. The information on the Certificate of Delivery shall include the state job number (or purchase order number), consignee, destination, sizes, class, lengths, number of pieces and plant of origin. The Certificate of Delivery may be the proper certifying statement on Company letterhead or on shipping papers.
- One copy of the Certificate of Delivery and shipping papers shall be furnished to the Resident Engineer at the time of delivery.
- Product approval of precast concrete box culverts is determined by visual inspection and quality control tests conducted at a certified plant or as allowed by the Plant Certification procedures. These tests may include, but are not limited to, three edge bearing tests, absorption, compressive strength tests or other concrete quality control tests.
- Precast reinforced box culverts are to be in accordance with Section 607 of the Standard Specifications, Job Contract requirements, Design Drawings, and referenced AASHTO and ASTM Specifications (as applicable). Design of the precast box culverts must meet the current edition of the LRFD Bridge Design Specifications, with interims, and be certified and sealed by a Professional Engineer, who is registered in any of the United States. The manufacturer shall submit the design and reinforcing steel configuration to the Engineer for review and comment.
- Products in compliance with specifications shall be marked with a NPCA certified seal or an ACPA stamp prior to shipment. Each piece shall bear the stamp, a cast date and the manufacturer's identification (name or logo). The manufacturer's identification shall be sufficient to clearly indicate the plant of origin.
- Only products specifically manufactured by and shipped by a certified plant can be furnished to an ARDOT project in accordance with the letter of agreement on-file with ARDOT. When products covered by this letter of agreement are shipped to a certified intermediate party and then to a Contractor for a Department project, a copy of the certified manufacturer's Certificate of Delivery shall be furnished to the Resident Engineer.
- If the Department determines that products furnished under this agreement are not in compliance with the ARDOT and other referenced specifications, either by inspection upon delivery or by inspection at the plant, the non-compliant units may be rejected, unless a Department-approved remediation is performed and deemed by the Engineer to be successful.

