

# **QPL 22 MASONRY ANCHORS**

## **SECTION A: MECHANICAL TYPE**

### **PROCEDURES**

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for masonry anchors.

#### **SPECIFICATIONS**

None

#### **PROCEDURES**

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

The following test method utilizes a mechanical device for masonry anchors. A hole is drilled into a 6" x 12" concrete cylinder the diameter and depth shall be specified by the manufacturer of the anchor. A brush and compressed air are used to remove dust from the drilled hole. The mechanical anchor is installed into the hole according to the manufacturer's recommendations. A threaded coupler is then attached to the mechanical anchor and tightened. A steel rod is threaded into the other end of the coupler and tightened. The unit is then tested for tensile pullout strength.

A passing test is indicated by the breaking of the concrete test specimen or by exceeding the manufacturer's recommended load capacity for the anchor.

## **SECTION B: CEMENTITIOUS TYPE**

### **PROCEDURES**

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for masonry anchors.

#### **SPECIFICATIONS**

None

## **PROCEDURES**

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

This test method uses the product as a bonding agent for masonry anchors. A hole is drilled into a 6" x 12" concrete cylinder to a depth and diameter as recommended by the manufacturer. A brush and compressed air are used to remove dust from the hole. The product is mixed, if applicable, according to the manufacturer's recommendations and placed into the drilled hole. A rebar or threaded rod representative of the size and type application (to be agreed upon by the manufacturer and TDOT) is pushed into the hole using a twisting motion to insure that the product makes good contact with the concrete and steel. The product is allowed to cure according to the manufacturer's recommendations and then the unit is tested for tensile pullout strength.

A passing test is indicated by the breaking of the concrete test specimen or by exceeding the manufacturer's recommended load capacity.

## **SECTION C: EPOXY TYPE**

### **PROCEDURES**

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for masonry anchors.

#### **SPECIFICATIONS**

None

#### **PROCEDURES**

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

This test method uses the product as a bonding agent for masonry anchors. A hole is drilled into a 6" x 12" concrete cylinder to a depth and diameter as recommended by the manufacturer. A brush and compressed air are used to remove dust from the hole. The product is mixed, if applicable, according to the manufacturer's recommendations and placed into the drilled hole. A rebar or threaded rod representative of the size and type application (to be agreed upon by the manufacturer and TDOT) is pushed into the hole using a twisting motion to insure that the product makes good contact with the concrete and steel. The product is allowed to cure according to the manufacturer's recommendations and then the unit is tested for tensile pullout strength.

A passing test is indicated by the breaking of the concrete test specimen or by exceeding the manufacturer's recommended load capacity.

## **SECTION D: EPOXY TYPE (ENCAPSULATED)**

### **PROCEDURES**

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for masonry anchors.

#### **SPECIFICATIONS**

None

#### **PROCEDURES**

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

This test method uses the product as a bonding agent for masonry anchors. A hole is drilled into a 6" x 12" concrete cylinder to a depth and diameter as recommended by the manufacturer. A brush and compressed air are used to remove dust from the hole. The product is mixed, if applicable, according to the manufacturer's recommendations and placed into the drilled hole. A rebar or threaded rod representative of the size and type application (to be agreed upon by the manufacturer and TDOT) is pushed into the hole using a twisting motion to insure that the product makes good contact with the concrete and steel. The product is allowed to cure according to the manufacturer's recommendations and then the unit is tested for tensile pullout strength.

A passing test is indicated by the breaking of the concrete test specimen or by exceeding the manufacturer's recommended load capacity.

## **SECTION E: EPOXY TYPE (INJECTION TECHNIQUE)**

### **PROCEDURES**

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for masonry anchors.

## **SPECIFICATIONS**

None

## **PROCEDURES**

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

This test method uses the product as a bonding agent for masonry anchors. A hole is drilled into a 6" x 12" concrete cylinder to a depth and diameter as recommended by the manufacturer. A brush and compressed air are used to remove dust from the hole. The product is mixed, if applicable, according to the manufacturer's recommendations and placed into the drilled hole. A rebar or threaded rod representative of the size and type application (to be agreed upon by the manufacturer and TDOT) is pushed into the hole using a twisting motion to insure that the product makes good contact with the concrete and steel. The product is allowed to cure according to the manufacturer's recommendations and then the unit is tested for tensile pullout strength.

A passing test is indicated by the breaking of the concrete test specimen or by exceeding the manufacturer's recommended load capacity.