

530.3.06

C. Seal Seams

Edge and end seams must overlap at least 4 in (100 mm) on all applications.

D. Apply Membrane

Apply the membrane as follows:

Rub the entire membrane firmly and completely as soon as possible to minimize bubbles caused by air outgassing or water vapor from the concrete.

Slit all fish mouths, overlap the flaps and repair with a patch pressed or rolled to make the seal. Seal the edges with mastic.

Patch misaligned or inadequately lapped seams with the membrane.

E. Protect Membrane

When necessary, use a manufacturer-approved protection system to protect waterproofing membranes from damage caused by backfill material or other construction activities.

F. Repair Membrane

As soon as possible, patch all tears and inadequately lapped seams with waterproofing membrane.

Slit fish mouths and repair with a patch extending 8 in (200 mm) in all directions from the slit and seal the edges of the patch with mastic.

530.3.06 Quality Acceptance

General Provisions 101 through 150.

530.3.07 Contractor Warranty and Maintenance

General Provisions 101 through 150.

530.4 Measurement

This work will be measured for payment in square yards (meters) of accepted waterproofing.

530.4.01 Limits

General Provisions 101 through 150.

530.5 Payment

This work will be paid for at the Contract Price per square yard (meter) for waterproofing complete in place.

Payment will be made under:

| | | |
|--------------|---------------|-------------------------|
| Item No. 530 | Waterproofing | Per square yard (meter) |
|--------------|---------------|-------------------------|

530.5.01 Adjustments

General Provisions 101 through 150.

Section 531—Dampproofing

531.1 General Description

This work consists of dampproofing concrete and other types of masonry surfaces.

531.1.01 Definitions

General Provisions 101 through 150.

531.1.02 Related References

A. Standard Specifications

General Provisions 101 through 150.

B. Referenced Documents

General Provisions 101 through 150.

531.1.03 Submittals

General Provisions 101 through 150.

531.2 Materials

Ensure that materials meet the requirements of the following Specifications.

| Material | Section |
|---|----------|
| Bituminous Material for Dampproofing or Waterproofing | 826.2.01 |

Unless otherwise specified, Pitch Type I or II shall only be used when required by the Contract. When pitch is required, use Type I on vertical surfaces and Type II on flat surfaces.

Use the primers specified in Subsection 826.2.01 with asphalt and pitch seal coats.

531.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

531.3 Construction Requirements**531.3.01 Personnel**

General Provisions 101 through 150.

531.3.02 Equipment

General Provisions 101 through 150.

531.3.03 Preparation**A. Prepare Surfaces**

Concrete surfaces shall cure at least 5 days before dampproofing.

Prepare the surface as follows before dampproofing:

1. Thoroughly clean and dry the surface to be dampproofed.
2. Spray at least two applications of primer, allowing primer to be thoroughly absorbed before the next application.

531.3.04 Fabrication

General Provisions 101 through 150.

531.3.05 Construction**A. Dampproof Surfaces**

After the final primer coat has been absorbed, dampproof the surface as follows:

1. Evenly apply a seal coat having a temperature of 300 °F (150 °C) to 350 °F (175 °C) for asphalt and 200 °F (90 °C) for pitch.
2. Allow the seal coat to dry at least two days or longer. The seal coat shall be hard before any water or earth contacts it.
3. Protect the seal coat from the weather during the drying period.

531.3.06 Quality Acceptance

General Provisions 101 through 150.

531.3.07 Contractor Warranty and Maintenance

General Provisions 101 through 150.

531.4 Measurement

This work will be measured for payment in square yards (meters) of accepted dampproofing.

531.4.01

531.4.01 Limits

General Provisions 101 through 150.

531.5 Payment

This work will be paid for at the Contract Price per square yards (meters) for dampproofing complete in place.

Payment will be made under:

| | | |
|--------------|--------------|-------------------------|
| Item No. 531 | Dampproofing | Per square yard (meter) |
|--------------|--------------|-------------------------|

531.5.01 Adjustments

General Provisions 101 through 150.

Section 533—Bridge Deck Waterproofing Membrane

533.1 General Description

This work consists of preparing surfaces for and applying a protective membrane to concrete bridge decks. The membrane shall serve as a waterproof barrier to be overlaid with asphaltic concrete.

The waterproofing method shall be as specified on the Plans and shall be one of the following:

- **Method A:** A waterproofing membrane system placed directly on the Portland cement concrete bridge deck surface.
- **Method B:** A waterproofing membrane system placed directly on a specified grade and thickness of freshly placed asphaltic concrete on the bridge deck.

533.1.01 Definitions

General Provisions 101 through 150.

533.1.02 Related References

A. Standard Specifications

Section 400—Hot Mix Asphaltic Concrete Construction

Section 413—Bituminous Tack Coat

Section 500—Concrete Structures

B. Referenced Documents

General Provisions 101 through 150.

533.1.03 Submittals

General Provisions 101 through 150.

533.2 Materials

All materials shall meet the requirements of the following specifications:

| Material | Section |
|----------------------------------|----------|
| Asphaltic Concrete | 400 |
| Bituminous Prime | 412 |
| Bituminous Tack Coat | 413 |
| Sand for Blast Cleaning | 804 |
| Waterproofing Membrane Materials | 888.2.01 |
| Mortar | 834.2.03 |

For a list of sources, see QPL 22.