

Pattullo Bridge Replacement Project

How we build it: precast bridge deck panels

What are precast bridge deck panels?

Precast deck panels are reinforced concrete slabs that are prefabricated. After the steel girder spans are erected, the precast deck panels are transported to the bridge site and installed in place, creating the bridge deck. There are approximately 2,500 deck panels on the project, including for the main bridge, and south and north approaches. A typical deck panel is approximately 4 metres wide by 6.5 metres long and weighs approximately 17 metric tonnes. That's about the same weight as three elephants!

How are the deck panels fabricated?

Precast deck panels involve building formwork, installing rebar, then pouring and curing concrete.

1. Formwork is built and reinforcing is installed.
2. Concrete is poured, and the deck panel goes through a steam curing process.
3. After steam curing, formwork is stripped and the panel goes through a wet curing process.
4. When the concrete has reached its design strength for installation, the panels are transported to site.

How are the deck panels installed?

1. Deck panels are transported to site via truck and barge.
2. Large cranes lift the deck panels and place them on top of steel girders to form the bridge deck.
3. After the deck panels are in position, additional reinforcing is installed and cast-in-place "stitches" are poured between the deck panels to connect them.
4. Once the deck panels are installed and stitches are cast, the new roadway is paved on top.



Deck panel formwork is constructed before concrete is poured.



Concrete has cured and the deck panel has been stripped.

Contact the Project



24/7 Phone Line
1-844-815-6149



Project Information
pattullobridgereplacement.ca
pattullobridgeproject@gov.bc.ca



Work on the Project
bcib.ca
info@bcib.ca