

FAQ | Traffic Decks

? What is a traffic deck?

A traffic deck is a special bridge that lets people move on top of an area where workers are digging and building. **It keeps people moving safely on the traffic deck, while construction happens below!**

? What is a traffic deck made of?

A traffic deck is made up of **steel and concrete columns** that support vertically, **steel beams** that support horizontally, and **panels** which form the top layer of the deck.



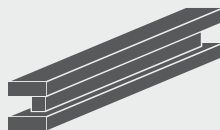
? How deep are the columns the traffic deck rests on?

Coring machines drill about 4 meters below excavation level (which is already 21-24m below the surface) to put in **steel and concrete columns**. These can be up to 28m long and weigh about 9 tonnes!



? What sits on top of the columns?

Long steel beams are placed on top of the steel columns. Each beam is around 20 meters long, 1.1 meters wide, and weighs 20 tons!



? How are the panels attached to the columns and beams?

The panels are **bolted to the beams** to keep them flat and level.



? What special coating is used on the traffic decks?

Traffic deck panels are made of steel, but have a **special top coating** to make sure car tires don't slip, with a road-like (asphalt) finish!





Can you build a traffic deck **without closing the road?**

Yes! After one side of the traffic deck is finished, vehicles move onto the finished deck while the other side of the road gets dug up. Once both sides are done, four lanes of traffic are moving on the deck over top of the construction area.



How many **columns and beams** are used for each traffic deck?

The number **changes depending on the size of the station**. Mount Pleasant is the smallest with 10 beams and 20 columns, while Arbutus has 29 beams and 58 columns.



How many **panels** are used at each station?

The number of panels **changes at every station** depending on the station size and traffic pattern. Mount Pleasant has 44 panels for example, while Arbutus has 148 panels.



How big and heavy is each traffic deck panel?



Each panel weighs about **10 tons**, or as much as one adult elephant and one baby elephant combined!



The panels are different lengths, but most are **12 meters long**, or about the wingspan of 7 Canada geese!



Check it out!

Be sure to visit our site viewing windows at Great Northern Way construction site, located at the intersection of Great Northern Way and Thornton Street!

