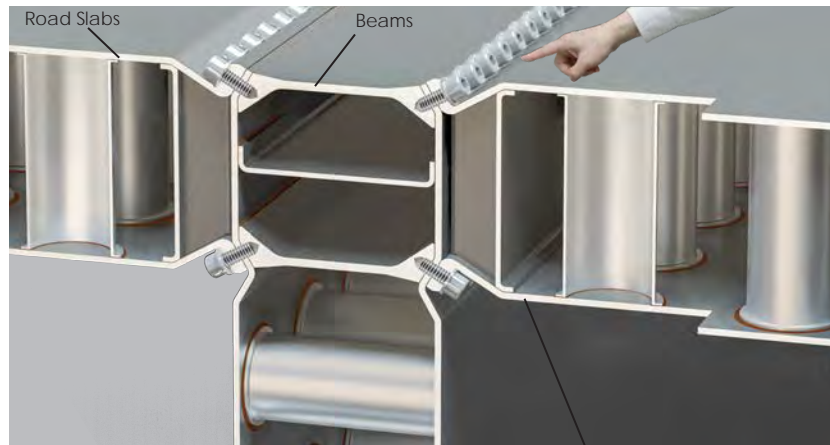


PREFAB SANDWICHED ELEVATED HWY

A CORE SLAB ROAD, A NEW WORLD

1. **Hi-tech material:** Slabs and beams adopt BROAD's sandwich-structure "Steel Core Slab", use zero concrete and is 60%-70% lighter. "Steel Core Slab" is fabricated with hot-wind brazing, the joints are stronger than the materials themselves, boasting a fatigue life over 5 times longer than the traditional orthotropic plates, ensuring no split of the joints in its 150 years life.
2. **AI design & manufacture:** All components are intelligently manufactured by AI and brazed in one piece. Each module can be transported in container size and form 120 m² highway area (surface area), realizing global shipping with low cost.
3. **Hi-tech construction:** On-site only needs to build the pier foundation, no temporary road is required. The piers, slabs and beams can all be hoisted by crane from the new highway, construction speed is 10 times faster, a crew can at least complete 1 km per month.
4. **Replacing traditional steel highway:** Costs are 30%-70% lower than traditional steel structures, due to the lower steel consumption, lower prefabrication costs, lower transportation costs, lower installation costs, and shorter construction periods.
5. **Replacing concrete highway:** Concrete is a brittle material and might collapse due to geological defects or earthquakes, and rust is hard to detect. Many concrete bridges collapsed every year globally, but not steel bridges.
6. **Alternative to surface roads:** The cost is even lower in hilly/mountainous/desert/rainy areas.
7. **Ecological protection:** Reduces disturbance to villages and towns and protect natural water systems and ecosystems from disruption.
8. **Application:** Highways, municipal roads, cross-river/sea bridges, railway foundations, can also be used for suspension bridges, double or multiple decks. Suspended rail interfaces are reserved under the bridges, making the installation of light rail trains easy.



Road Slab & Beam Material:
Steel Core Slab



Key Parameters:

Standard Bridge Width: 13m/17m/22m
Standard Span: 38m
Net Height of Piers: 5-30m
Construction Speed: 1km/month
Design Life: 150 years