PILE ENCAPSULATION

EConcrete®’s ecological pile encapsulation substitutes standard pile encasements, applied to protect steel piles or repair timber pier piles deteriorated by marine burrowers such as worms and mussels. In addition to the necessary constructive support and protection, EConcrete®’s ecological pile encapsulation creates a new and productive habitat for marine plants and animals such as fish, crabs, and oysters.

EConcrete®’s ecological piles encapsulation has shown excellent biological capabilities, including the addition of nursing grounds for key species like the Atlantic blue crab (*Callinectes Sapidus*).

Independent structural inspection conducted by CH2MILL engineers a year post deployment and after a heavily iced winter revealed “hard and sound concrete.”
The dimensions of the pile forms are fitted according to the pile diameter and concrete constructive requirements for each project.

The specific concrete matrix used for the casting will be defined according to the project’s distinct constructive and biological requirements.

Example dimensions from a NY pier project:

- **Top view**: Ø 56 cm
- **Side view**: 75 cm
- **Front view**: 100 cm

Reusable mold segments can be connected to allow encapsulation of piles of various heights.