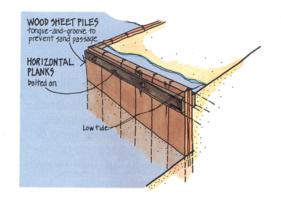
Perched Beaches

Construction of a low retaining sill to trap sand results in what is known as a "perched beach," one that is elevated above its original level. Perched beaches have many of the same qualities as natural beaches, and the submerged sill does not intrude on the view of the waterfront. Perched beaches are appropriate erosion control measures where a beach is desired and sand loss is too rapid for convenient or economical replacement. They can also be used to create a new beach for recreation and shore protection.



Construction materials and design considerations for perchedbeach sills are generally similar to those for fixed breakwaters, described in the next section. The most important difference is that in order to effectively retain sand, sills must either have filter material on the landward side or be constructed of tongue-and-groove interlocking elements. Also, the location of the sill should be indicated in some way so that beach users do not step off the perched beach into unexpectedly deep water.

The sand for a perched beach may be trapped by the sill after being carried inshore by the normal wave action, or it may be transported from another site as beach fill. Trapping of sand could deplete adjacent beaches that would have received these deposits in the absence of the sill. Fill from other sand sources can be used to limit this effect on neighboring beaches and make the perched beaches available for protection and enjoyment sooner than wave-carried fill.





Perched beach being filled