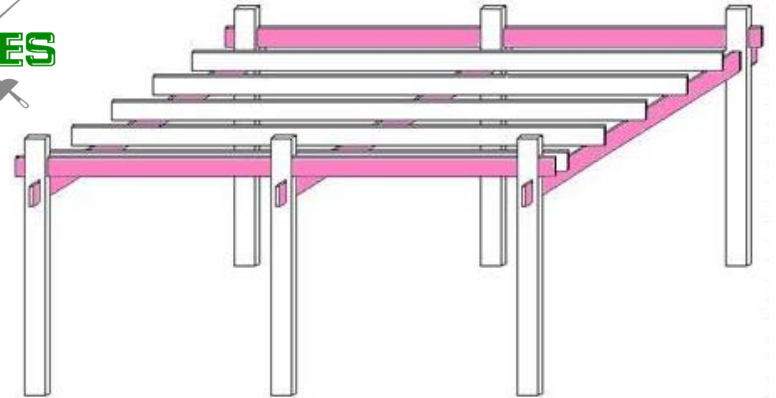
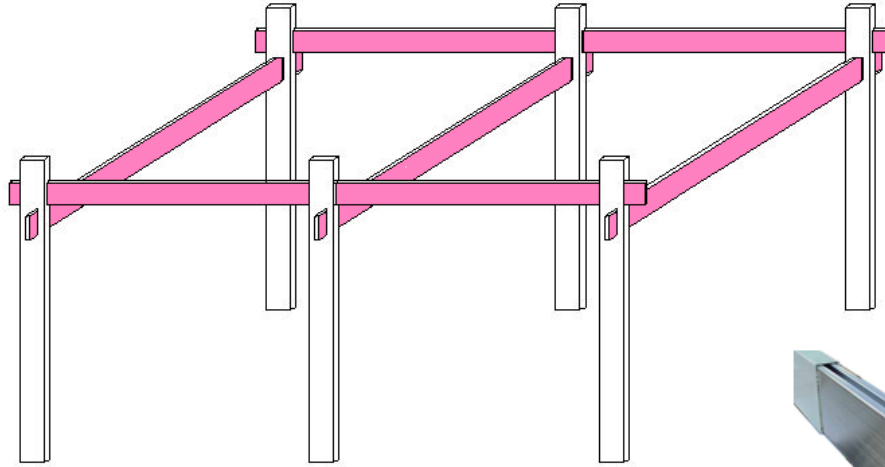


# REINFORCED PERGOLAS

For a large 6 post pergola, the design can be altered slightly to reduce the amount of aluminum stiffeners needed, **lowering the overall cost of structure**. Filled Carrying Beams are run across the longest span. Filled Cross Beams are used only on the ends; with the Steel Insert System forming the metal to metal connection. Ribbed Cross Beams are used to fill the remaining area, with the middle filled Carrying Beam eliminating sagging. A six post pergola can span up to 16' x 16'.



A BEAM

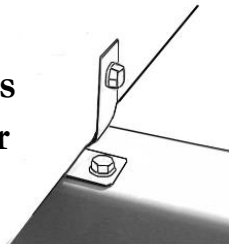
Recommended stiffener: Aluminum A BEAM, filling entire profile to establish metal to metal connection.

The filled beams allow for a large open area, and can be configured so the widest post spans are facing the most favorable direction.

*Recommended for Residential Applications*



Attach remaining cross beams and top cross pieces with stainless steel powder coated beam brackets.



Posts are reinforced with the Steel Insert System: 3" or 4" 40wt galvanized pipe set in concrete (or core drilled into pad). Add 2 post adapters, 1 rail adapter and 1 rail connector per post. Sleeve routed PVC post over steel post.



Rail Connector

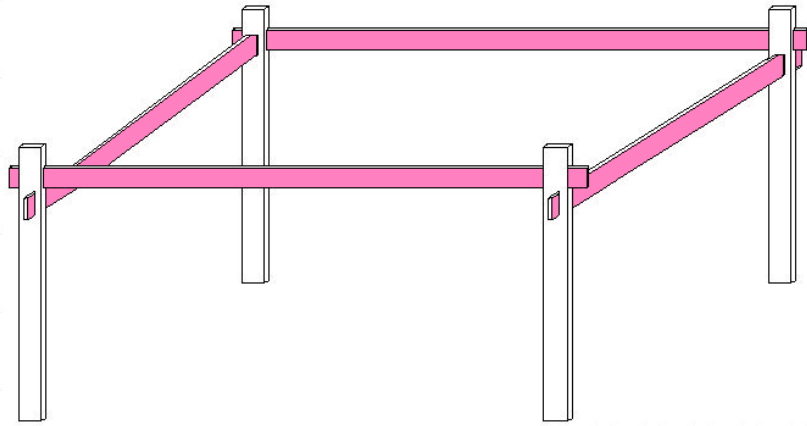


Rail Adapter



Post Adapter

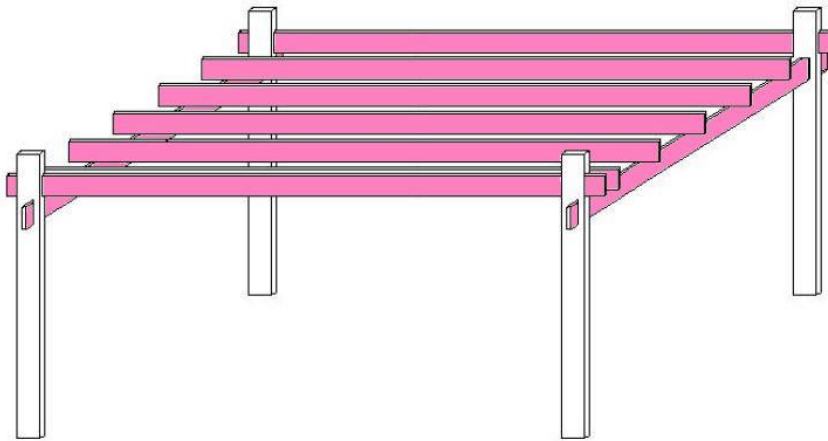
# STRUCTURAL PERGOLAS



Posts are reinforced with the Steel Insert System:  
3" or 4" 40wt galvanized pipe set in concrete  
(or core drilled into pad). Add 2 post adapters, 1 rail  
adapter and 1 rail connector per post. Sleeve routed  
PVC post over steel post.

*Recommended for  
Commercial & Residential  
Applications*

If any post span on a 4 post pergola exceeds 8', all carrying and cross beams must be filled with a stiffener (anything over 8' *will* sag). Recommended stiffener: Aluminum A BEAM, filling entire profile to establish metal to metal connection.



A BEAM



Rail Connector



Rail Adapter



Post Adapter



Attach remaining cross  
beams and top cross pieces  
with stainless steel powder  
coated beam brackets.

