

# Hambro D500™ - Installation

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## 1. SPREADING JOISTS

Joists are placed on the wall or beam and spread to approximately 4' o.c. Check your load conditions and fire ratings for permissible options.



## 2. PLACING ROLLBARS®

Rollbars are designed to support the plywood forms, the slab dead weight and a 40 psf construction load. When rotated and locked into notches in the top chord, the rollbars guarantee joist spacing while providing lateral and torsional stability.



## 3. INSTALLING PLYWOOD FORMS

Together, the plywood and rollbars form a rigid diaphragm during construction, providing a platform for your workforce. The Hambro ® system accommodates standard 4' x 8' plywood sheets. (3/8" ,1/2" or 5/8" may be used.)



## 4. MESH IN PLACE

Standard 8' x 20' sheets of mesh are easily placed over the top chord "S" of the Hambro ® joists. With the top chord "S" acting as a highchair, the mesh forms a natural catenary to reinforce and support the concrete slab.



## 5. USING SPANNERS

Temporary spanners are installed to support 1/2" or 5/8" plywood sheets. Spanners are not required when using overlapped 3/8" plywood sheets.



## 6. VIEW FROM BELOW

No permanent bottom chord bridging is required. Bottom chords are fabricated with clips generally at third points to accommodate rollbars for temporary bracing during the concreting stage. No shoring is required unless noted.



## 7. POURING CONCRETE

Minimum design is a 2 1/2" - 3,000 psi slab. The monolithic pour develops diaphragm action and forms an acoustical seal where the slab passes over walls. The patented top chord "S" embeds in the pour of the slab for composite action.



### **8. STRIPPING FORMWORK**

Rollbars and plywood forms may be stripped when the concrete reaches 500 psi, which is usually the day after the pour. The deck is ready for other trades when the concrete reaches a strength of 1,000 psi, usually within 48 hours after the pour. The formwork is easily removed for future re-use.



### **9. UL, ULC FIRE RATED**

Furring channels are tied to the bottom chord of the Hambro® joists. Fire rated gypsum board completes the assembly, providing an attractive continuous ceiling.

