GENERAL NOTES

VOID DAMS - Void dams are provided by CTC to restrict the flow of C.I.P. concrete into the slab voids. Typically, the dam is placed six inches from the ends of the slab at voids without pour slots. The dam is placed two feet from the ends of the slab at voids with pour slots. This distance can be modified as required for embedment of reinforcement or to increase the slab end shear strength. To facilitate the placement and consolidation of the concrete fill, CTC recommends and provides blockouts in the top of the voids at locations where endfill length exceeds 1'-6".

BEARING - The recommended design bearing dimension is three inches with a field installation minimum of two inches. CTC recommends and furnishes a 3/8" x 1/4" neoprene end bearing strip to provide uniform bearing during erection. Final bearing is provided when C.I.P. concrete fills the remaining space.

GROUT KEYS - The longitudinal keys between adjacent slabs must be filled with grout to fully develop the concentrated load distribution and shear friction capacity of the Hollow Core slab system. CTC recommends a mix consisting of one (1) part cement to three (3) parts paving or builder's sand by weight, with a maximum water content of five (5) gallons per sack of cement.

RESISTANCE TO LATERAL LOADS - Lateral loads may be transmitted through Hollow Core slabs to resisting elements, such as frames or shear walls, by diaphragm action. When concrete topping is to be installed over the slabs, the diaphragm is normally designed to be in the topping. In this case, shear transfer takes place by shear friction, based on WWF mesh or other reinforcement in the topping. For untopped systems, diaphragm action is developed by means of shear friction reinforcement at the ends of the slabs, as described in ICCES Report ESR-2152 and CTA Technical Bulletin 80B3. It is important to detail this reinforcement such that it is effectively anchored into the lateral force resisting system, such as by reinforcement hooked into shear walls.

VOID DRAIN HOLES - Void drain holes will be installed in Hollow Core slabs. Cap top holes prior to soil backfill or topping pour to prevent material from washing into void and plugging drains. Drain holes must be cleaned out after end closure concrete pours are complete. The contractor may patch holes, if necessary, once the structure is weather proofed.

CONSTRUCTION LOADS - Once erected, the Hollow Core slabs form a safe platform for workers and normal construction tools. Avoid staging other construction materials on the slabs that have not had the joints grouted and the grout reach design strength. At no time should these materials exceed 1,000 pounds on a single slab or 1,500 pounds on any two adjacent slabs without prior written approval.

PENETRATIONS - CTC recommends that all penetrations less than 6" in diameter for mechanical, plumbing, electrical, etc. be field installed by the trades involved. Prior consultation with the Architect/Engineer and CTC is advisable to insure that the structural capacity of the system is not compromised. CTC recommends that openings larger than 6" be made at time of slab fabrication. Detailing of these openings on the design drawings will aid in the shop drawing/calculation submittal process. Refer to page 15 for design considerations when large openings are used.