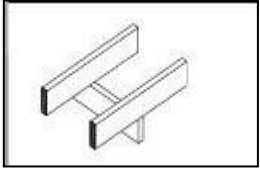


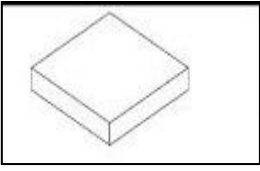




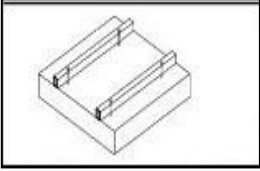


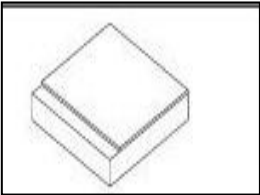





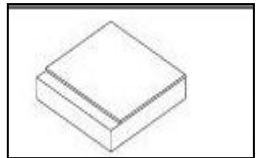


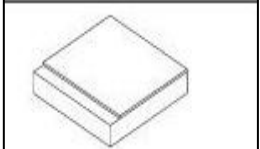


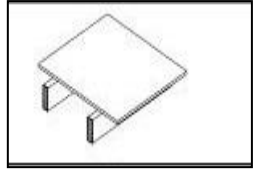








RECOMMENDED RESTRAINING METHODS FOR DIFFERENT TYPES OF FLOORING DEPENDNG ON HEIGHTS

SUBSTRATE	Solid Strip T & G Floor 19mm or 21mm thick	Overlay T & G Solid Floor 14mm-12mm thick	T & G Engineered pre- finished floor with a ply substrate 21mm thick	T & G Engineered pre-finished floor with a ply substrate 14mm thick	Engineered pre-finished floor with a ply substrate & locking system 14.5mm thick	Parquetry
JOISTS 	 NAIL & GLUE Top nail if \geq 100mm		 GLUE			
CONCRETE 			 GLUE	 GLUE	 FLOAT OR GLUE	 FULL BED OF GLUE
CONCRETE & BATTENS 	 NAIL & GLUE Top nail if \geq 100mm		 GLUE			
CONCRETE & PLY 	 FULL BED OF TROWEL GLUE Top nail if \geq 100mm	 FULL BED OF TROWEL GLUE & SECRET NAIL	 GLUE	 GLUE	 FLOAT OR GLUE	
CONCRETE & MATT 			 GLUE	 GLUE		
CONCRETE, PLY MATT 			 GLUE	 GLUE		
BATTENS & PLY 	 FULL BED OF TROWEL GLUE Top nail if \geq 100mm	 FULL BED OF TROWEL GLUE & SECRET NAIL	 GLUE	 GLUE	 FLOAT OR GLUE	

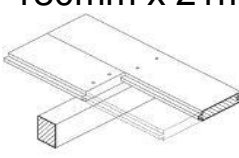


SUBSTRATE OPTIONS THAT FLOORING IS INSTALLED ONTO.

JOISTS	Ensure joist's MC is within 1% of MC of floor been installed & hardwood floor end matched allow for 450mm joist spacing
CONCRETE	Concrete slab MC must be less than 5.5% & level slab to be within + or – over 3mm over 3mts before installing floor
CONCRETE & BATTENS	If concrete slab is not level, battens are installed by spiking and packing to slab to get a level surface to install floor.
CONCRETE & PLY	Concrete slab has to be level so ply can be pinned and the ply may need to be sanded.
CONCRETE & MATT	Concrete slab has to be level, mats fully glued as flooring cannot be nailed or pinned
CONCRETE, PLY & MATT	Concrete slab has to be level so ply can be pinned and mats fully glued as flooring cannot be nailed or pinned
BATTENS & PLY	If concrete slab is not level, battens are installed by spiking and packing to slab to get a level surface to install floor if 14mm is to be installed, ply pinned to battens allow for floor to be trowel glued.
BUILDERS PLASTIC	To stop moisture coming up from slab, taped into place.
GLUE	When trowel glue floor to a substrate you must use a well known flexible adhesive
NAILS	Secret nail into 80mm floor board, top nail x 2 into 130mm x 19mm floor board, top nail x 3 into 180mm x 21mm.



SECRET NAIL



TOP NAIL

