



ITI Spec Joist Duct Hole Size & Locations - 1.5 kPa + 1.8 kN Joists at 450mm centres						
Joist Series	Joist Size	Max. Span (mm)		Duct Hole Height x Width (mm)		
		Single	Continuous	150x300	175x350	200x400
Dead Load = <math><100 \text{ kg/m}^2</math>						
20-Series	240x45	4000	4700	Span / 2	N/A	N/A
	300x45	4700	5200	Span / 2	Span / 2	N/A
45-Series	240x53	4200	4600	Span / 2	N/A	N/A
	300x53	5000	5500	Span / 2	Span / 2	Span / 2
70-Series	300x58	5200	6300	Span / 2	Span / 2	Span / 2
	360x58	5900	6500	Span / 2	Span / 2	Span / 2
	400x58	6100	6500	Span / 2	Span / 2	Span / 2
90-Series	240x89	5200	6100	Span / 2	N/A	N/A
	300x89	5700	7000	Span / 2	Span / 2	Span / 2
	360x89	6300	7700	Span / 2	Span / 2	Span / 2
	400x89	6700	8100	Span / 2	Span / 2	Span / 2

### INSTALLATION REQUIREMENTS:

- A. Holes must be sized and located in accordance with the above chart. Vertical hole location may vary centrally in the web provided that a minimum distance of 5mm of web remains the edges of the holes and the flanges.
- B. Knockout holes (40mm circular pressed holes spaced at approximately 400mm centres) can be utilized anywhere they occur. 40mm holes may be manually drilled at 400mm centres where knockout holes are not provided as standard in the joist by the manufacturer.
- C. No holes are permitted in joist cantilever area with the exception of the 40mm knockout holes.
- D. All holes must be cut in a skilled like manor using a minimum 40mm diameter hole saw to all corners.
- E. No more than 3 holes are permitted per span (excluding knockout holes) with the joists to be assessed accordingly.
- F. Continuous span defined as having the smaller of the spans no less than 0.7 x the larger span otherwise it is to be considered a single span.
- G. Minimum span of joists to be no less than 3.5x the intended hole width.
- H. **LOADING CONDITIONS**
- I. Dead Load: Self weight + Maximum 100 kg/m<sup>2</sup>
- J. Live Load: 1.5 kPa Uniformly Distributed Load + 1.8 kN Concentrated Load
- K. Maximum joist spacings: 450mm on centre
- L. Structural Importance: Category 1 - Domestic or Secondary Element
- M. Maximum Equilibrium Moisture Content: <math><18\%</math>