PRECAST SPECIFICATION REQUIREMENT
Part 1: General Rules of Precast Elements

No	Item
1	Concrete Strength for Precast Elements during:
1a.	Transfer (Lifting from mould)

Table 1 : Recommeded minimum concrete strength for lifting and handling

** CIS 9:2008*

Application	Minimum concrete strength , f' c
None specific, fine controlled crane, non-pre-stressed.	10 MPa*
Lifting which involves significant impact or high acceleration	15 MPa*
All units where concrete strength for lifting is specified in contract document	As specified
Concentrically pre-stressed elements (piles, wall panels or thin floor slabs).	20 MPa
Eccentrically pre-stressed elements (tees, deep flooring units).	25 MPa
Bridge beams and similar highly stressed Pre-stressed elements	30 MPa or as specified
* Dependent on anchor length or as recommended by insert manufacturer	
Note : Special care should be taken with pre-stressed elements to ensure lifting devices are anchored in conmpression zones, unless covered by specfic design	

1b. Installation : Minimum 7 days

1c. Service (After 28 Days)

Table 2 : Concrete grades for each precast elements

No.	Elements	Minimum Concrete Grade (N/mm^2)
1	Floor Plate (reinforced or prestress concrete plates)	40
2	Linear structural elements (columns, beams and frame elements)	35
3	Hollow core slabs	50
4	Wall elements	35
5	In-situ concrete (for topping)	30

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No	Item
2	Measurement of dimension for elements
2a.	Permitted deviations of cross-sections

** BS EN 13369:2004*

Target dimension of the cross-section in the direction to be checked	ΔL (mm)	Δc (mm)
L ≤ 150 mm	+10 -5	± 5
L = 400 mm	± 15	+15 -10
L ≥ 2500 mm	± 30	+30 -10

L = is the target size of the linear measure expressed in milimeters

Δ L = Permitted Deviation for dimensions L

C = Design Cover

Δ L = Permitted Deviation for cover C

2b. Length, height, width and thickness

* Dimensions should not be measured along the edges

Dimensions in millimetres

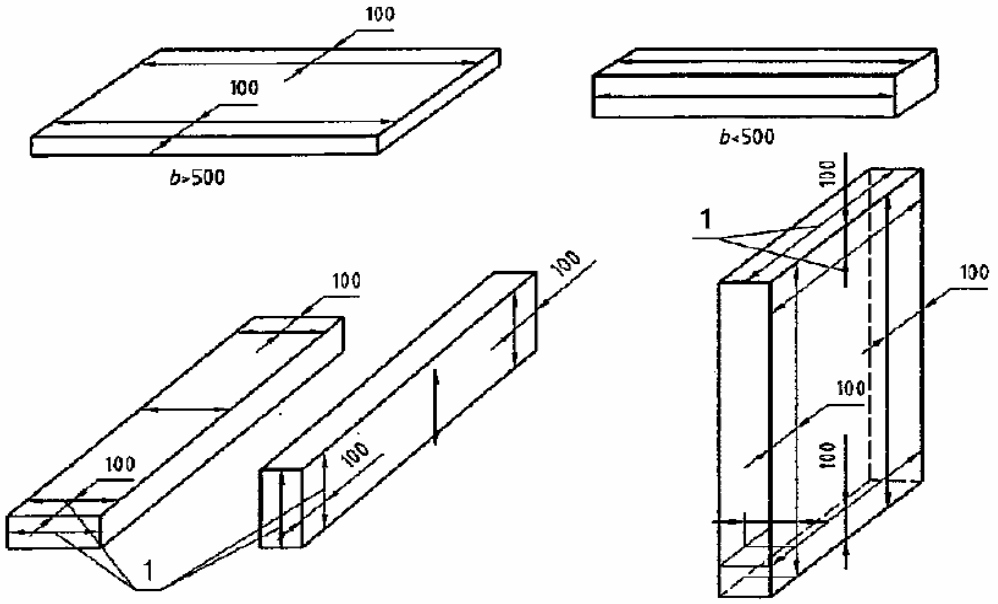

FIGURE 1: Measuring points for length, height, width and thickness
*BS EN 13369:2004

3	Surface characteristics of finished product

Visual inspection

**Surface of final products should be smooth (free from recess, lump, groove ridge, step discontinuity and undulation)*