

Contents

1. Introduction	1
2. Design	2
2.1. General	2
2.2. Dimensions and Shape of Precast Elements	2
2.3. Concrete Constituents	3
2.4. Reinforcement	4
2.5. Mould Design	6
2.6. Joints & Connections	7
2.7. Lifting and Handling Devices	8
3. Fabrication Process	10
3.1. General	10
3.2. Normal Casting Process for Precast Reinforced or Prestressed Concrete Elements	11
3.3. Dry Casting Process (Extrusion Method) for Precast Hollow Core Elements	19
4. Delivery, Handling and Storage	24
4.1. Delivery	24
4.2. Handling	26
4.3. Storage	29
5. Installation	33
5.1. General	33
5.2. Installation of Vertical Precast Component	35
5.3. Installation of Horizontal Precast Component	39
6. Quality Inspection	42
6.1. General	42
6.2. Inspection of Precast Concrete Elements	42
7. Common Defects	57
7.1. Common Defects and Remedies	57
Appendix A-B	64
References	73

