1) Construction begins by bedding the first block of the Firechest onto a suitable foundation/constructional hearth in accordance with Building Regulations using Isokern lip glue.

2) Install the firechest using lip glue making sure all elements are level. 100mm of brick/blockwork must be built around the sides and back of the firechest to comply with building regulations. The inside of the firechest must be finished with a suitable fireback or firebrick slips.

3) Install the gather using lip glue making sure all elements are level. The front face of the gather can be finished with plasterboard on dabs. The maximum load bearing capacity of the ISOKERN firechest and gather is 2500kg.

4) Offset blocks 'if required' must be glued together with lip glue and be fully supported. Please note a chimney should be built straight where ever possible. A starter flue block will be required above the offset blocks to stagger the joints between the outer casing and inner flue blocks.

5) Bed the first outer casing onto the gather top plate or offset blocks using lip glue making sure the rebate (raised lip) is uppermost. The starter flue block is then put inside the casing bedded with lip glue. The socket on the starter flue block must be uppermost and the air gap between the starter flue and the casing should be kept clear. Lip glue joints should be approximately 2mm thick, a special bag is provided for ease of application.

6) Casings and flue blocks are added using lip glue for all joints. Ensure the air gap between the inner flue and outer casing remains clear. The outer surface of the casings to be finished with plasterboard on dabs or plaster. The side that faces the wall does not need an external finish.

7) External chimneys must be tied to the structure at maximum intervals of 1.5m and at the point where it departs from the roof using 2 x suitable stainless steel wall ties. These are fitted into the casing joints and are not always required for internal chimneys. Please consult the Isokern technical office.
8) Where the chimney passes through a floor or roof, a sliding joint is made using mineral wool or similar non-combustible material. 38mm clearance must be maintained between the outer face of the chimney and any structural timber or loose combustible material. Floor boards, skirting boards, dado rails and other non-structural components may, however, be in contact with the chimney.

9) High tensile steel reinforcement rods will be required for all chimneys with a height that exceeds 1.4m above the roof line, 1.1m if the wind speed exceeds 44ms. These rods are available from Isokern and must be grouted (1:3 cement/sand) into the holes provided in the outer casings.

10) Code 4 lead flashing to be fitted at roof level as per building regulations. We recommend that you scorch a 5-10mm deep channel into the outer surface of the casings and fold in the top edge of the flashing.

11) Finish the outer surface of the casings above the roof with 2 part waterproof render. The recommended mix is: 1:2:5-6 cement:lime:sand for the undercoats. 1:2:8-9 cement:lime:sand for the final coat. The number of coats required will depend upon the degree of exposure, generally a two coat mix is acceptable. The mix may vary due to climate conditions, the thickness of any one coat should not exceed 15mm, and each subsequent coat should be reduced by approximately 3mm.

12) A suitable DPC is fitted above the last casing, it should be dressed up the outside of the last flue block or chimney pot.

13) Isokern concrete capping to be lip glued onto the DPC/last casing. If the DPC is lead then it should be coated with bituminous paint.

14) Flaunching with 1:3 cement and sharp sand to seal around the flue block or chimney pot. A chimney pot should be bedded at least 75mm into the outer casing block.

15) If you have any queries or questions please do not hesitate to contact Schiedel Isokern.