Ref. **Output**

ASSESSMENT OF OPENING

ADJACENT TO PATIO DOORS

AS SHOWN

CONTENTS

SUMMARY RESULTS

UNSUFFICIENT MASONRY TO LEFT HAND SIDE OF PATIO DOORS FOR DEEMED TO SATISFY APPROACH TO BE USED.

Ref.	Output

PURPOSE

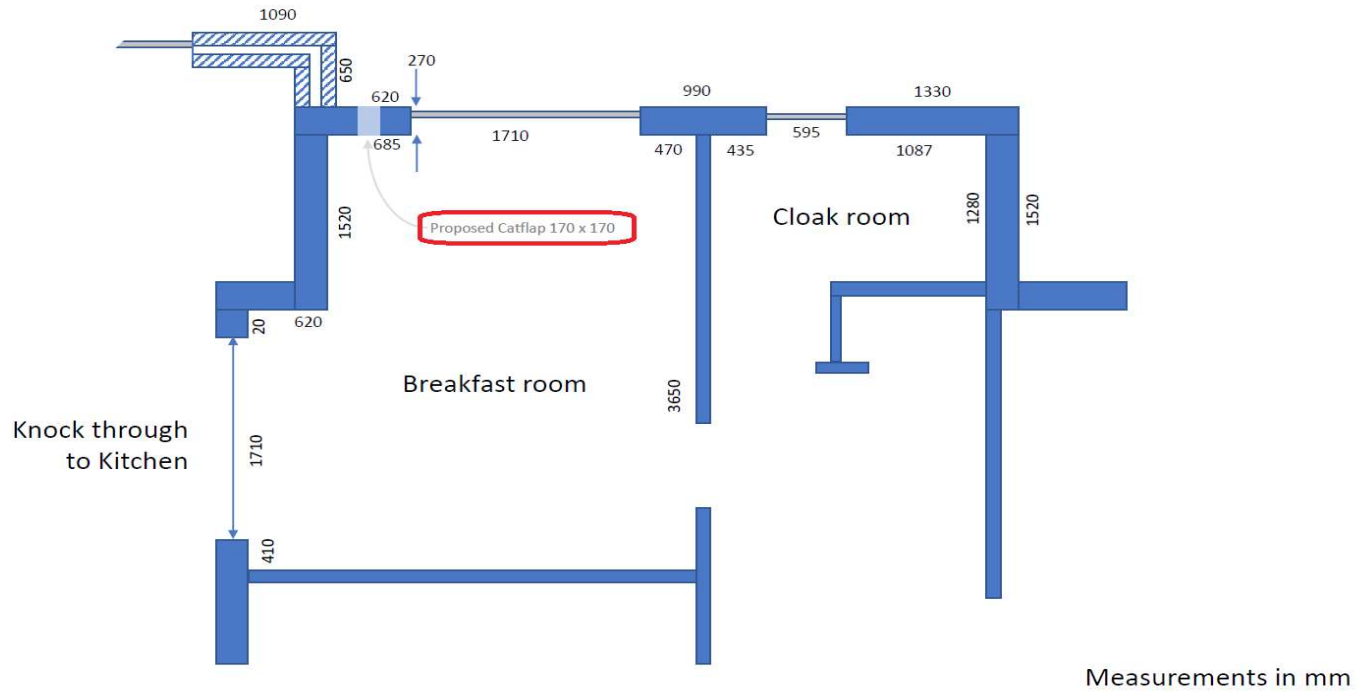
TO ASSESS THE STRUCTURAL IMPLICATIONS OF FORMING A 170mm X 170mm HOLE TO THE LEFT HAND SIDE OF THE PATIO DOORS – SEEN FROM THE INSIDE.

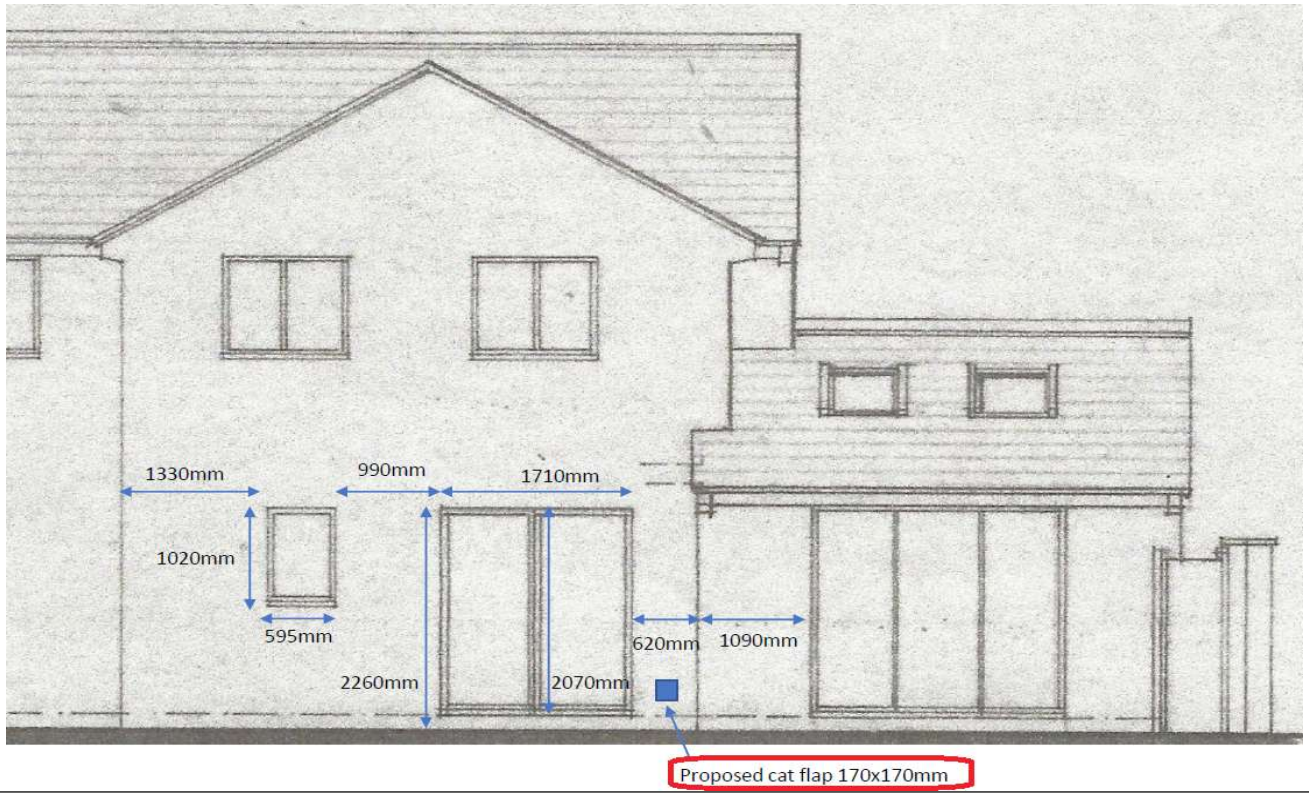
PHILOSPHY

A DEEMED TO SATISFY APPROACH WILL BE ATTEMPTED – BASED ON THE MASONRY PROPORTIONS PERMITTED IN BUILDING REGULATION PART A.

Ref.	Output

REQUIREMENT





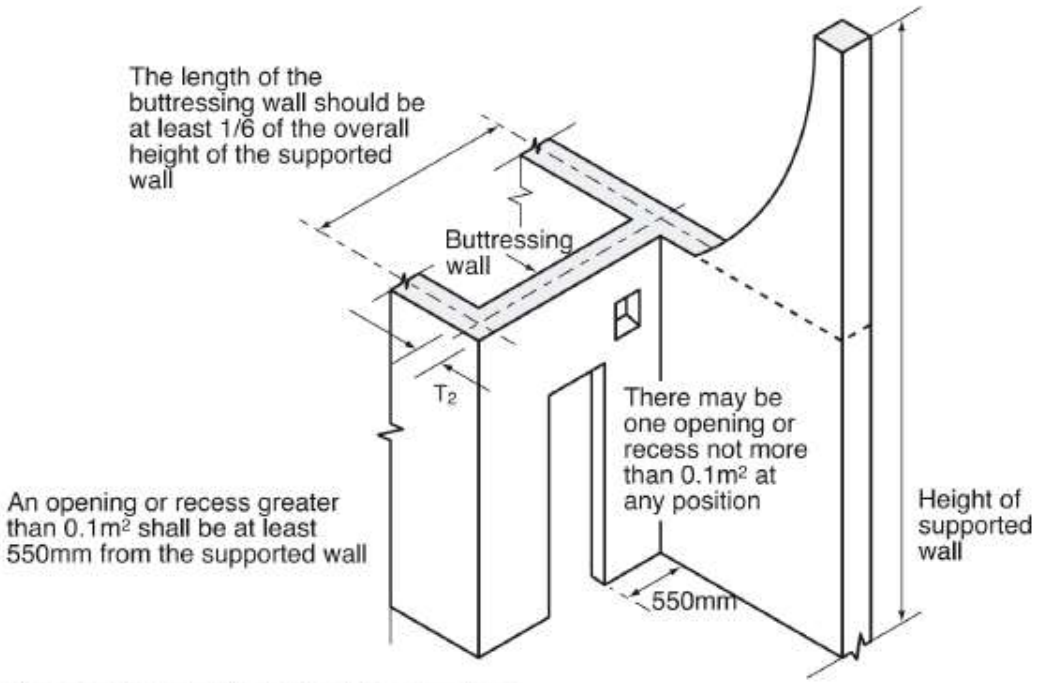
Ref.	Output

REQUIREMENT

CHECK 1

Diagram 12 Openings in a buttressing wall

See para 2C26



Notes

1 The buttressing wall should be bonded or securely tied to the supported wall and at the other end to a buttressing wall, pier or chimney.

2 Openings or recesses in the buttressing wall should be as shown – the position and shape of the openings should not impair the lateral support to be given by the buttressing wall.

3 Refer to Diagram 8 for the rules for measuring the height of the supported wall.

FOR THE PURPOSES OF BUTTRESSING A 170X170 HOLE WILL BE ACCEPTABLE

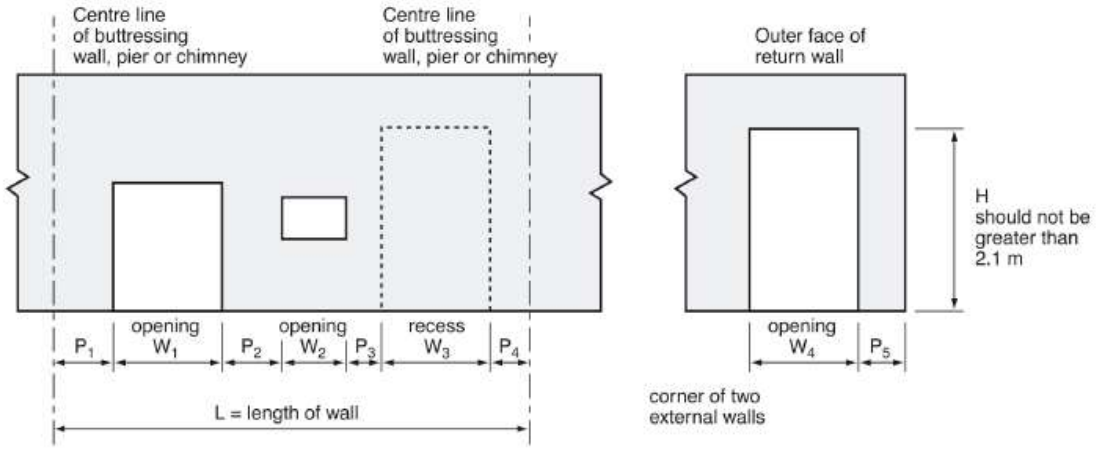
Ref.	Output

REQUIREMENT

CHECK 2

Diagram 14 Sizes of openings and recesses

See para 2C29



Notes

Requirements (refer to Table 8 for values of Factor X).

1 $W_1 + W_2 + W_3$ should not exceed $\frac{2L}{3}$

2 W_1, W_2 or W_3 should not exceed 3m

3 P_1 should be greater than or equal to $\frac{W_1}{X}$

4 P_2 should be greater than or equal to $\frac{W_1 + W_2}{X}$

5 P_3 should be greater than or equal to $\frac{W_2 + W_3}{X}$

6 P_4 should be greater than or equal to $\frac{W_3}{X}$

7 P_5 should be greater than or equal to but should not be less than 665mm. $\frac{W_4}{X}$

8 Take the value of the Factor X from Table 8, or it can be given the value 6, provided the declared compressive strength of the bricks or blocks (in the case of a cavity wall – in the loaded leaf) is not less than 7.3N/mm².

Table 8 Value of Factor 'X' (see Diagram 14)

Nature of roof span	Maximum roof span (m)	Minimum thickness of wall inner (mm)	Span of floor is parallel to wall	Span of timber floor into wall max 4.5m	Span of timber floor into wall max 6.0m	Span of concrete floor into wall max 4.5m	Span of concrete floor into wall max 6.0m
			Value of Factor 'X'				
Roof spans parallel to wall	Not applicable	100	6	6	6	6	6
		90	6	6	6	6	5
Timber roof spans into wall	9	100	6	6	5	4	3
		90	6	4	4	3	3

BREAKFAST / CLOAK WALL ADVISED AS MASONRY, THEREFORE WALL LENGTH FOR CONCIDERATION
L = 2800 FACE TO FACE, THEREFORE 3050 CENTRE / CENTRE
P5 = 620mm , OPENING WIDTH W4 = 1710mm , H=2260EXT AND INTERNAL FLOOR TO CEILING 2070mm

REF PAGE 02 AND CLAUSE 7 DIAGRAM 14 ABOVE AS 620mm < 665mm – THE WALL CANNOT BE DEEMED TO SATISFY EVEN BEFOE THE INTRODUCTION OF A HOLE IS CONCIDERED