

May I suggest that you consider this application under full Planning permission rather than under Permitted Development.

I note that a previous application for a full rooftop extension of a two-storey property in the Quickswood sector has been denied because: “the proposed rooftop extension, by reason of its siting, size, material and detailed design, would appear as an overbearing and incongruous addition to the host building, and would thereby detract from the character and appearance of the host building and the wider area, contrary to the aims of Policy D1 of the Camden Local Plan”. This application appears to be comparable to that which was denied.

In responding to Tulip Sadiq, and the 20th Century Society, Daniel Pope, Chief Planning Officer stated: “the buildings of the Quickswood Estate are thoughtfully designed and laid out with generous landscaping, they are modest in appearance, uniform and arranged in consistent terraces which is an attractive feature”. Given the “overbearing and incongruous addition” for this similar application, the “attractive feature” of the “consistent terraces” will be destroyed.

You have previously acknowledged the presence of High Alumina Cement (HAC) as a deleterious material in the buildings of Quickswood. If you are to grant Prior Approval, then can it be a condition that investigations are conducted to identify whether any conversion of the roof beams has occurred, and that the roof structure is capable of supporting any additional load, and without detriment to the adjoining properties.

CHALCOTS ESTATE

PHASE 1,

LONDON, N. W. 3.

REPORT

ON THE STRUCTURAL STABILITY OF THE HIGH ALUMINA
CEMENT BEAMS SITUATED AT SUSPENDED FLOOR AND
ROOF LEVELS.

Clarke, Nicholls and Marcel,
Consulting Engineers,
The Tower,
10, The Broadway,
Hammersmith, London, W6 7AW.

CHALCOTS ESTATE - PHASE 1,
LONDON, N.W.3.

1.) Object:

To report on the structural stability of the high alumina (HAC) beams situated at suspended floor and roof levels.

2.) The Problem:

The assessment of the stability of HAC structures became necessary due to the failure of precast prestressed beams of HAC over the Swimming Pool of the Sir John Cass and Redcoat School at Stepney.

After the manufacture of HAC concrete, 'conversion' will occur. The process is a continuous one in which the degree of conversion relative to the age of the concrete is a critical factor in assessing the strength of the concrete.

In favourable conditions of casting, curing and environment, there should not be a significant drop in the strength of the concrete.

Unfavourable conditions of manufacture and/or environment can lead to accelerated conversion and consequent loss of strength. HAC concrete which has suffered accelerated conversion is generally more porous and therefore potentially more vulnerable to chemical attack.

3.) The Buildings:

The buildings consist of two storey patio houses, types A and B and three storey Brown split level and Brown flat houses constructed basically of load bearing brick party walls supporting high alumina

- 2 -

3.) The Buildings (continued):

cement (HAC) precast, prestressed units at floor and roof levels.

The prestressing force results in a natural upward camber in the units.

The HAC suspended floor and roof units, which were manufactured by Pierhead Limited in 1966, are of "I" shaped section, 7" deep, and in varying spans, the maximum of which is 18'9" (5.7 m).

At floor levels the construction is of HAC units at various spacings with lightweight breeze blocks between and the whole area covered with screed, giving a degree of composite action.

The roof of the Brown Houses was constructed in the same manner as the floors noted above.

The roof to the Patio houses consists of isolated HAC purlins supporting wood wool and waterproof finish.

4.) Research:

A great deal of research was carried out by the Building Research Station, Universities, Professional Institutions and various manufacturers culminating in the Depart of the Environment Building Regulations Advisory Committee's "Report by Sub-Committee P" being published in August, 1975.

This report, together with later appendices, gives firm recommendations and data for the assessment of high alumina cement in domestic construction.

5.) Assessment:

An assessment of the design was carried out using the data contained and recommendations contained in the Report by Sub-Committee P.

The drawings used were those listed in Appendix A.

In view of the large number of partitions supported on groups of beams and the use of HAC units as primary members trimming staircases it was decided to assess both floor and roof units even

continued.....

- 3 -

5.) Assessment (continued):

where composite action occurred and they were within the span limitation of 6.5 m given in the Report by Sub-Committee P.

Having prepared the necessary calculations we are satisfied that the high alumina cement units comply with the requirements of the Report by Sub-Committee P.

6.) Conclusion:

The Report by Sub-Committee P contains recommendations and data for safety factors, enhancement factors, etc., which are based on the concrete having reached its likely lowest strength.

In view of this and the results of our calculations we are satisfied that the floors are structurally stable and will remain so.

It must, however, be pointed out that no visual inspection has been made and therefore any faults that may be present in the houses at this time have not been taken into account and our report is based on a design check, assuming the dwellings to be in good condition.

It is important that regular maintenance is carried out and especially that any water penetration should be corrected as soon as it occurs.

CLARKE, NICHOLLS and MARCEL.

CHALCOTS ESTATE - PHASE 1,
LONDON, N.W.3.

APPENDIX A:

Drawings used in the assessment of high alumina cement floor and roof Units:-

Clarke, Nicholls and Marcel's General arrangement and structural details:

Drawing No. 1315/H/3H
1315/H/8A
1315/H/9A
1315/H/10A
1315/H/17B
1315/H/18B
1315/H/19B
1315/H/21D
1315/H/22C
1315/H/23D
1315/G/24B
1315/H/36B
1315/H/58A

Pierhead Limited - General arrangement and details of high alumina cement Units:

Drawing No. PS 352/SW1642/1F
PS 352/SW1642/2C
PS 352/SW1642/3F
PS 352/SW1642/4B
PS 352/SW1642/5D
PS 352/SW1642/6B
PS 352/SW1642/7D
PS 352/SW1642/8A
PS 352/SW1642/9D
PS 352/SW1642/10
PS 352/SW1642/11
PS 352/SW1642/12
PS 352/SW1642/13C
PS 352/SW1642/14A