



d+b facades
OVERCLADDING SPECIALISTS

The Pinnacle, Willenhall

Development Case Study – The Pinnacle

Willenhall, West Midlands

Background

Originally constructed in 1967 using a large panel system, this 15 storey residential tower block is representative of high-rise buildings of the period.

Owned by Walsall Council and named St Mary's Court, it provided 87 two bedroomed units for social housing. Situated in the south east corner of the town centre, the high-rise building stood alone, flanked to the North and West by the town centre, to the East by low-rise residential housing and to the South by small industrial units.

The building was fully occupied from time of construction until the late 1980's, however through lack of investment and maintenance the building began to slip into decline in the early 1990's. Its appearance looked dated and unattractive, providing sub-standard accommodation to tenants which resulted in falling occupancy and lack of demand. New low-rise social housing was being constructed and occupants were rapidly migrating to this alternative.

This combination of falling occupancy and lack of demand made the building no longer economically viable to run and maintain and in 1997 the Council closed the building. It had apparently reached the end of its useful life.

As is common in these situations, the building and the immediate vicinity subsequently became subject to urban and social decay with the consequence that the Council took the decision to demolish St Mary's Court. However, further detailed financial evaluation of this option determined that the land value was no greater than the cost of demolition. Upon review, the Council decided to seek an alternative way forward by selling the now derelict building.

As the surrounding area had already been earmarked for regeneration, a principal condition of sale was that the purchaser should refurbish the building to a high standard. Tower blocks are a valuable resource and need to be retained for future generations, however their desirability is proportional to the quality of accommodation provided. This case study exemplifies that by adopting a high-quality approach to refurbishment, even once derelict tower blocks can be regenerated to provide accommodation for which there is demand.

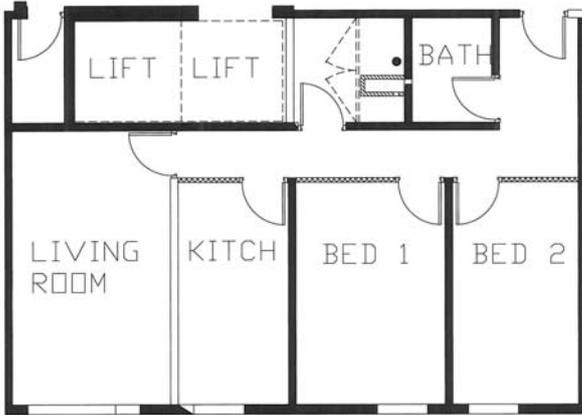


before

after

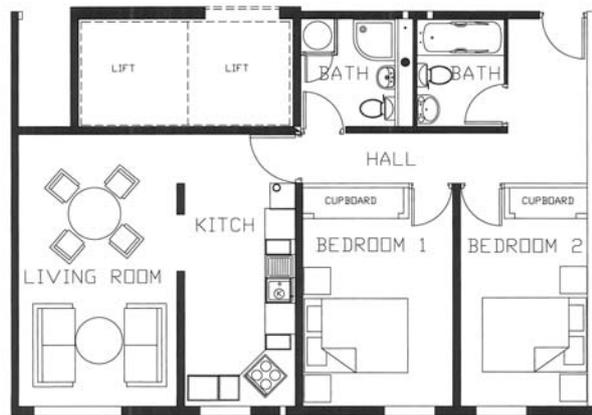


Existing Apartment Plan



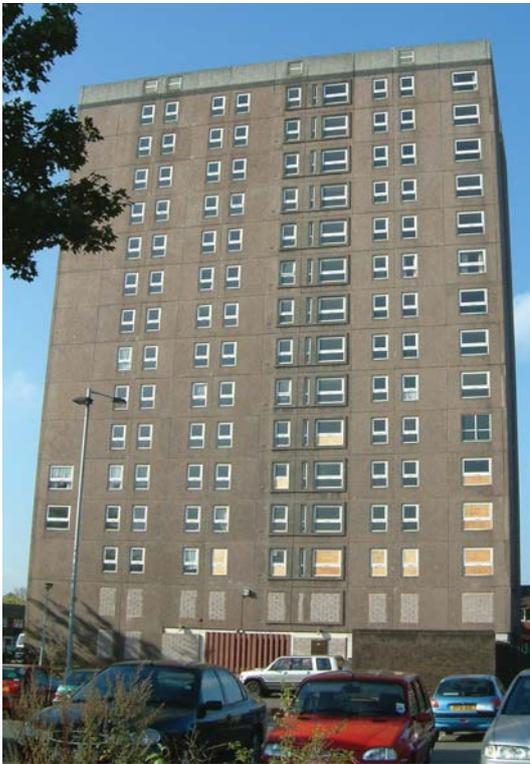
Dated internal layout with separate kitchen / living-room, single bathroom and no shower facility is inconsistent with modern living requirements.

Refurbished Apartment Plan



Contemporary accommodation post-refurbishment:

- Open-plan living with walk-through kitchen and lounge / diner
- WC / shower room in addition to WC / bathroom
- New-build-equivalent specifications





Commercial Appraisal and Proposal

d+b facades' appraisal of the commercial potential identified that:

- the location on the edge of the town centre was reasonable from a development perspective
- the building was structurally sound
- high-rise living is popular if the quality is right - numerous new build multi-unit residential building projects were underway and selling off-plan in nearby towns



*Hyde Park
Sheffield, still
pristine 20 years
after high
quality
refurbishment*



*6 new penthouse apartments were created
providing additional space for relatively
low cost*



The proposal to the Council included the following project aims:

- Provide new build-equivalent homes for re-sale to the open market. Previous experience had been gained with refurbishment of Hyde Park Flats for Northern Communities Housing Association initially for the World Student Games in 1990. They remain fully occupied and in pristine condition twenty years later
- Re-sale would be aided by a 10 year insurance-backed warranty from the NHBC. NHBC approval would be required for all works
- High-rise buildings are subject to severe exposure, therefore longevity and robustness of design and materials and products used was essential
- The internal arrangement (see floor plan) was dated and would need to be reconfigured to a contemporary layout.

Other Considerations

1. High-quality overcladding

The quality of the refurbishment directly influences the build cost and also the resale value. A saving of £0.5m in external refurbishment cost, equivalent to more than £5k per unit, could have been achieved if a cheap render cladding was used. Such an approach would have been inconsistent with the 'new-build-equivalent ethos' which underpinned the refurbishment / resale project and also would not have been acceptable to the NHBC, therefore high-quality aluminium rainscreen was chosen

2. Appearance

Tall buildings benefit aesthetically from penthouses and/or feature rooftops. These additions also contribute towards greater social appeal, adding distinctiveness and desirability to a development. Furthermore, through the addition of penthouses, additional space is created at relatively low cost

3. Internal structural modifications

The concrete pre-cast panel internal walls were structural and did not lend themselves readily to being altered to form contemporary layouts. In order to generate maximum appeal to future occupants, openings would need to be formed and strengthened in order to achieve open-plan living accommodation

4. Facilities improvement

A single bathroom / WC does not fit with modern living requirements. The refurbishment plan therefore had to provide each two bedroomed unit with a bathroom / WC suite and a shower room / WC suite (see floor plan).



Project Delivery

d+b facades' tender was accepted by Walsall Council in 2003. With full co-operation from the Council, a planning application was quickly submitted and consent was granted at the same time as purchase completion. Building Controls and NHBC design approvals were also granted. The refurbishment project commenced shortly thereafter beginning with strip-out works in late April 2004.

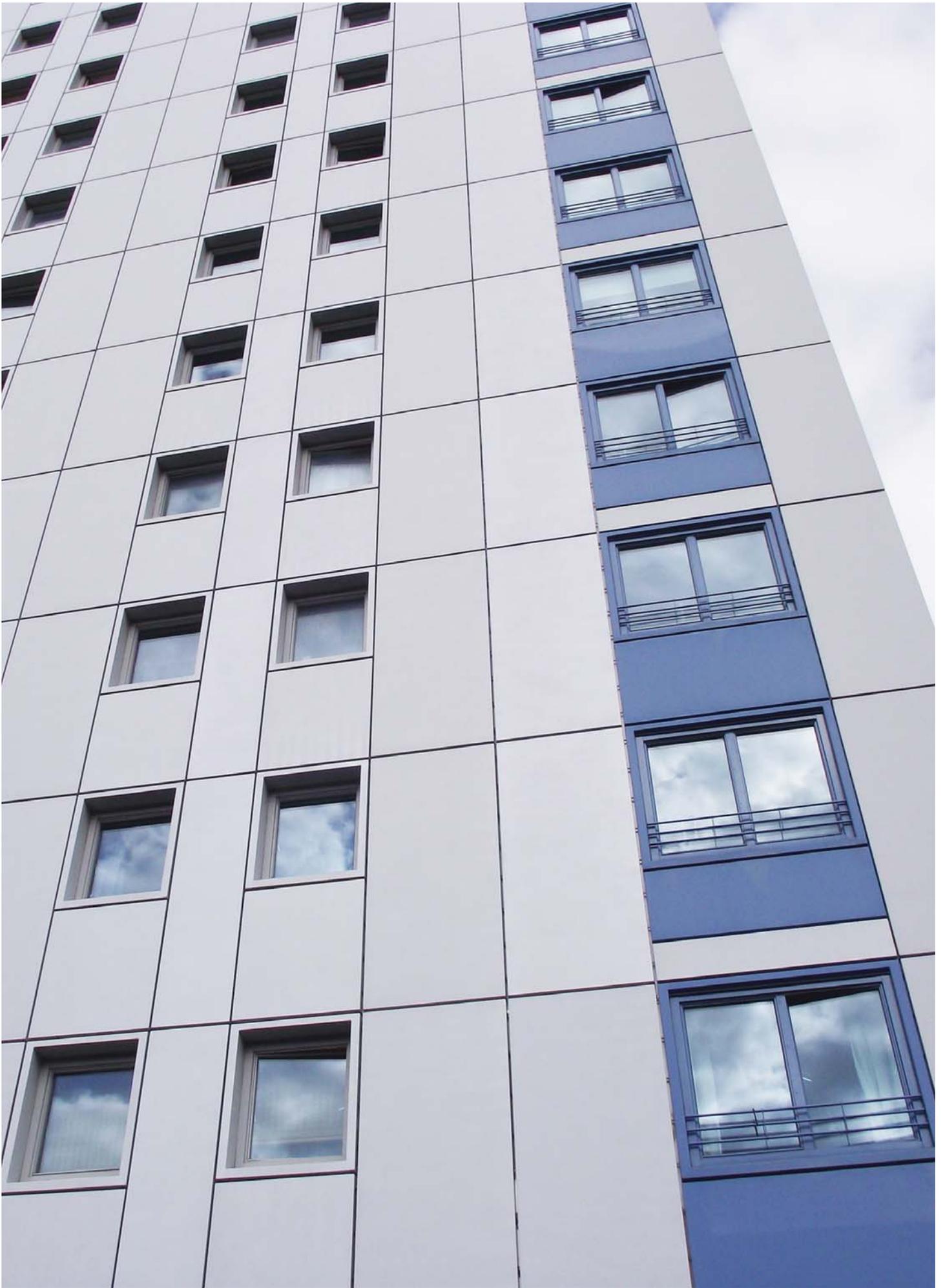
Project Completion and Analysis

Renamed 'The Pinnacle', the building was regenerated from derelict tower block to high-specification property including the addition of 6 new penthouse units within 50 weeks. It was completed in early April 2005 and was opened by the Lord Mayor of Walsall.

This redevelopment project was undertaken on a commercial basis involving complete refurbishment ahead of planned onward sale. From the outset it fully considered and adopted a high-quality, whole-life approach based upon system longevity and desirability of appearance, thereby exemplifying all the benefits of economic, social and environmental sustainability. It evidences what is possible in refurbishment projects.



Objective	Deliverable
ECONOMIC	<ul style="list-style-type: none"> At the point of building closure, rental income was c.£250 per unit with 50% occupation Building had reached the end of its useful life Demolition cost c.£0.5m Land asset value post-demolition c.£0.5m, therefore no economic benefit to demolition <p>Purchase and Refurbishment Costs:</p> <ul style="list-style-type: none"> Building consisting of 87 flats was purchased for £1m Refurbishment cost of £4m in 2005 <p>Economic Benefits:</p> <ul style="list-style-type: none"> Resale value of £7m Present rental income £450 per unit Present occupation 100% Building life extended by 60 years Refurbishment underwritten by comprehensive warranty Energy consumption per unit reduced from c.£200 per quarter to less than £70 per quarter, saving 70% Maintenance costs eliminated
SOCIAL	<ul style="list-style-type: none"> Contemporary and aesthetically pleasing External surfaces will remain pristine Desirable accommodation Low unit turnover Healthy internal environment Preserved and modernised the original design intent Good quality of life for tenants Has contributed towards local urban regeneration
ENVIRONMENTAL	<ul style="list-style-type: none"> Building performance equivalent to a new-build Low carbon emissions The building's embodied carbon has been preserved Refurbishment has used materials which are predominantly (65%) recycled and which are themselves 95% recyclable at the end of their useful lives



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