

Murray Grove



Architects:
Waugh Thistleton

Engineers:
Techniker

Timber Supplier:
KLH

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Thistleton

Murray Grove



Development of 29 flats
10 affordable and 19 private

Residents office on ground floor

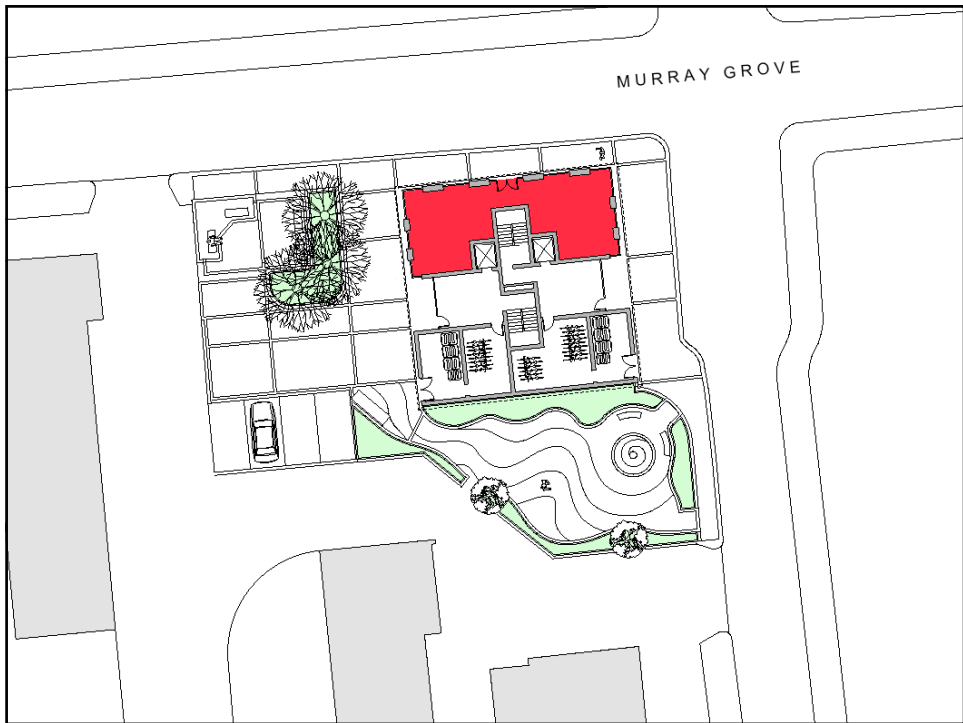
Clients
Telford Homes
Metropolitan Housing Association

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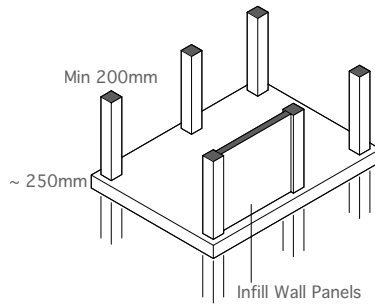
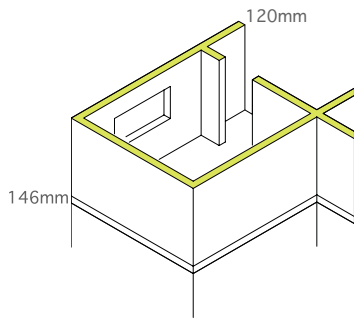


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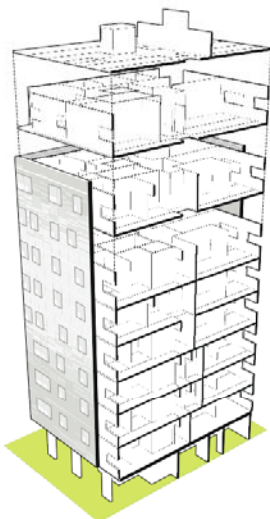


CO2 store
saves 300,000 kg of carbon
equivalent to 210 years of 10% reduction



Density 480kg/m³
 Weight 300tonnes
 Programme 49 weeks

2400kg/m³
 1200tonnes
 72 weeks

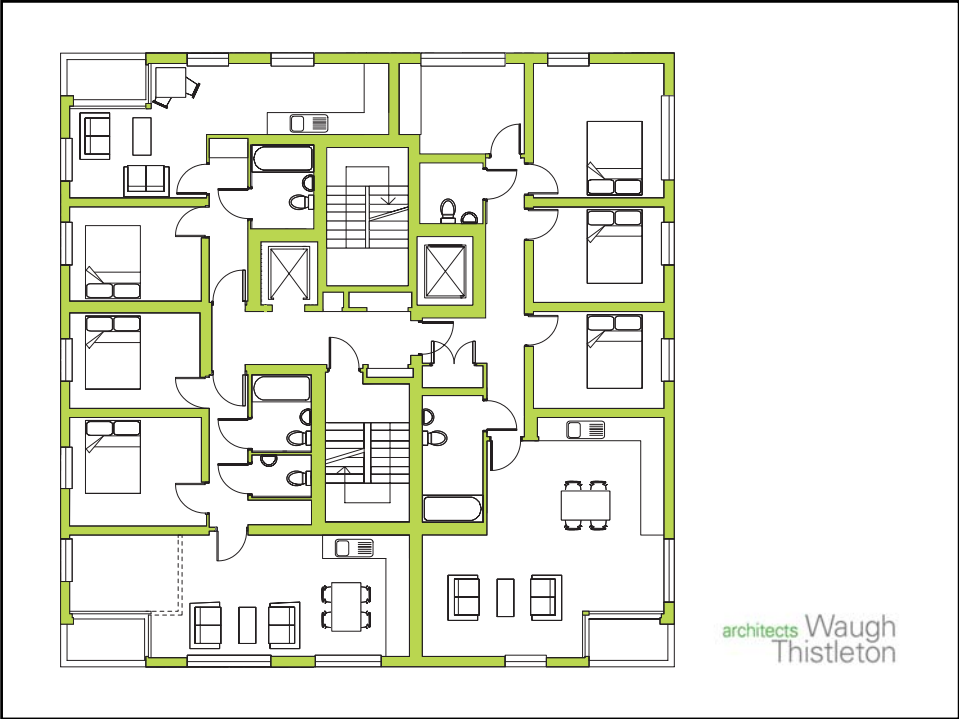
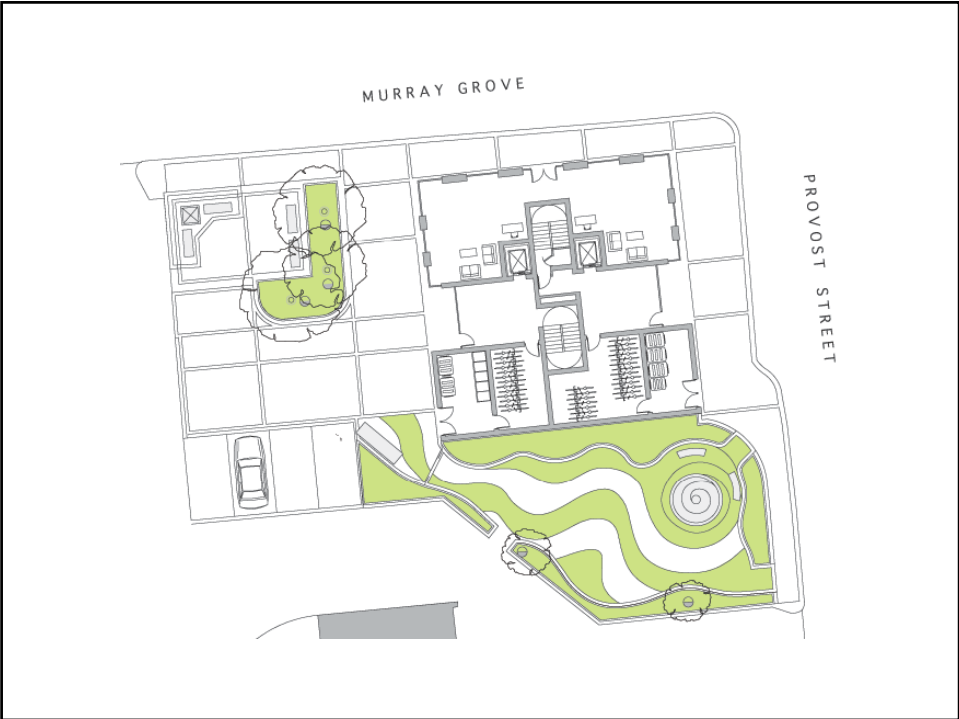


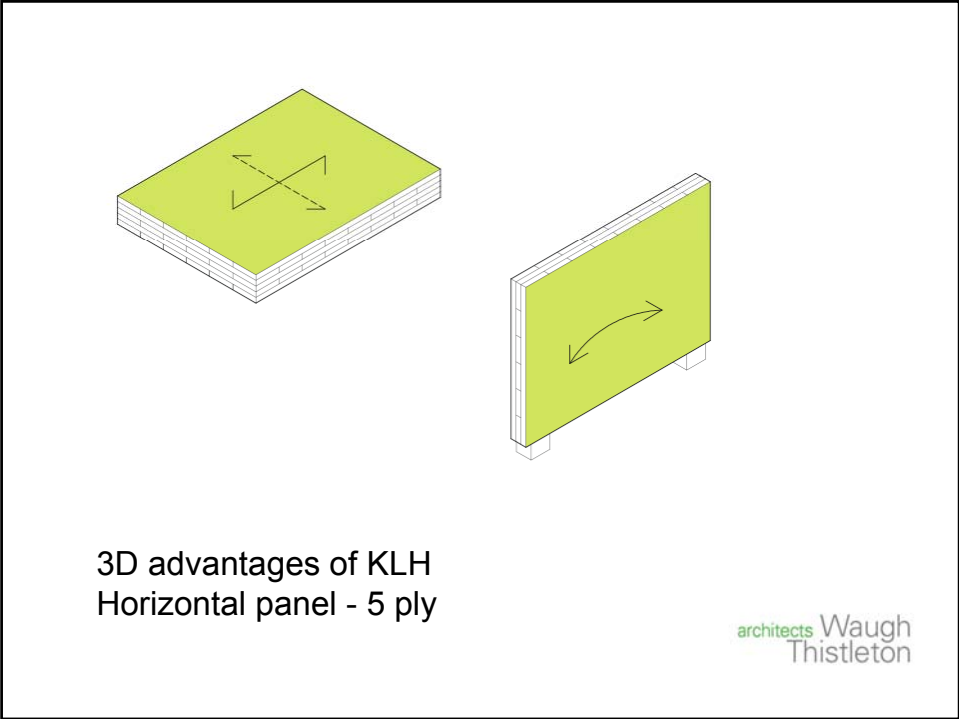
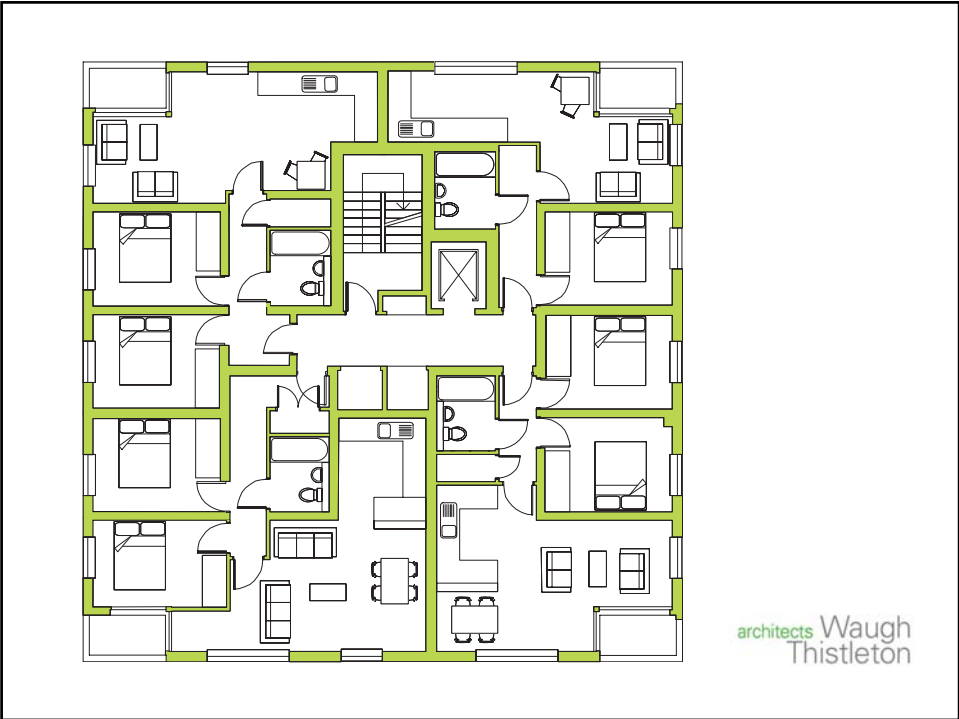
Honeycomb structure

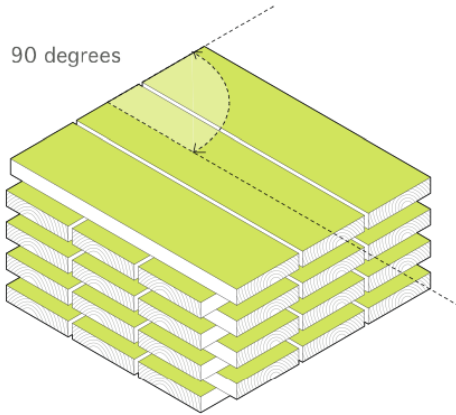
Rotated plans

Load-bearing walls, floors
 and cores

Tallest timber building in
 the world

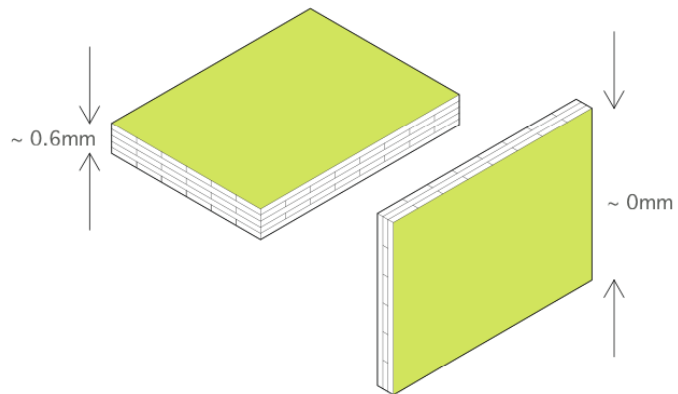




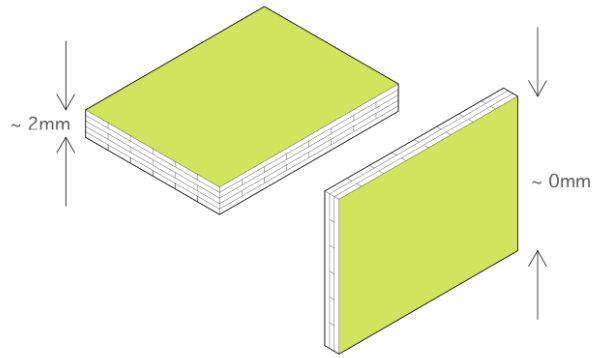


KLH Cross-laminated Panel

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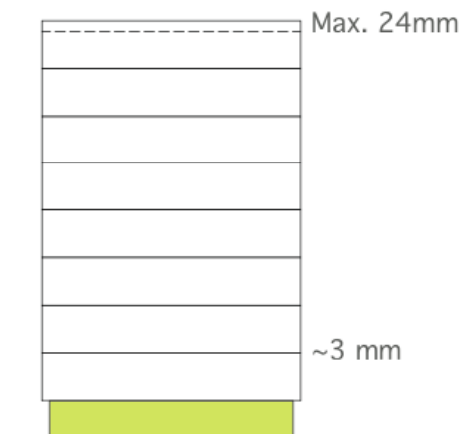
Creep - shortening due to compression under load



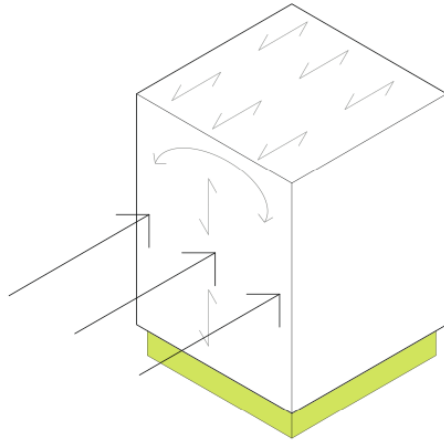
Moisture

Maximum moisture content at erection: 14 - 16%

Minimum moisture content in use: 8 - 10%



Total



Stability

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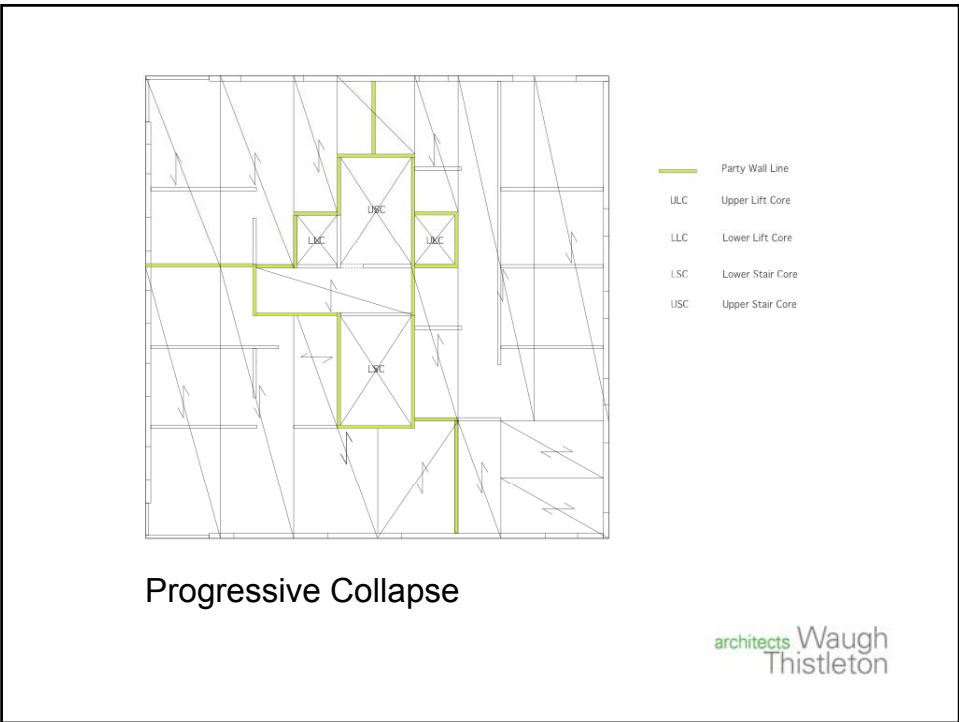
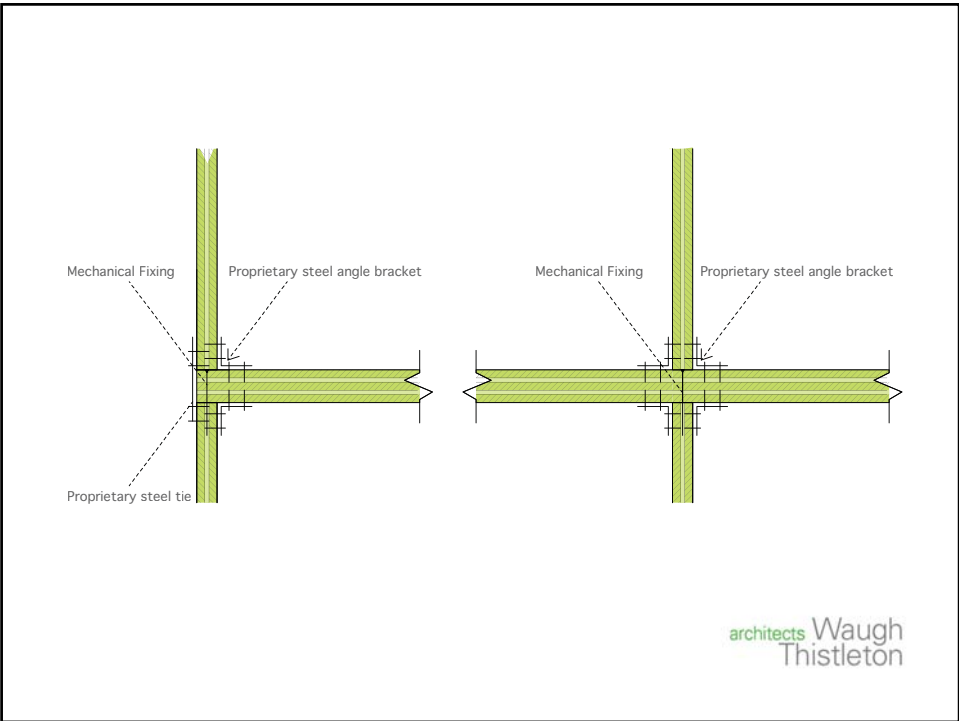
Progressive collapse

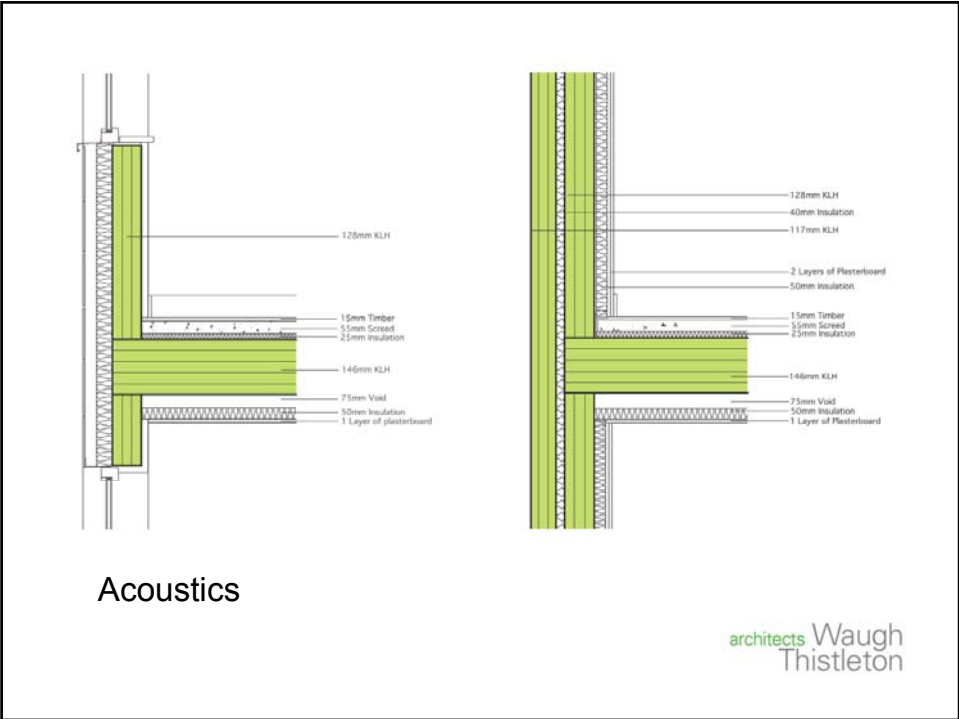
Notional horizontal and vertical ties - min 75kN

Removal of elements - 15% floor area,
<70m²

Design of key elements - 34kN/m²

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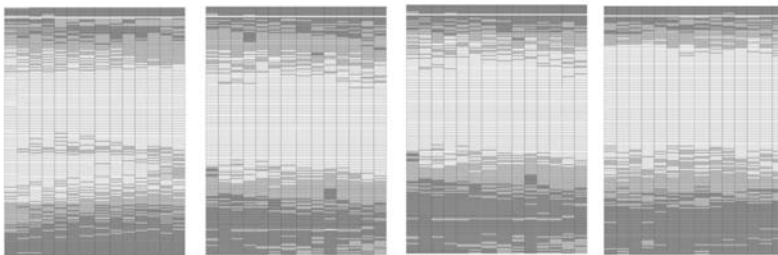




Nine storeys in nine weeks

Time saving of 22 weeks

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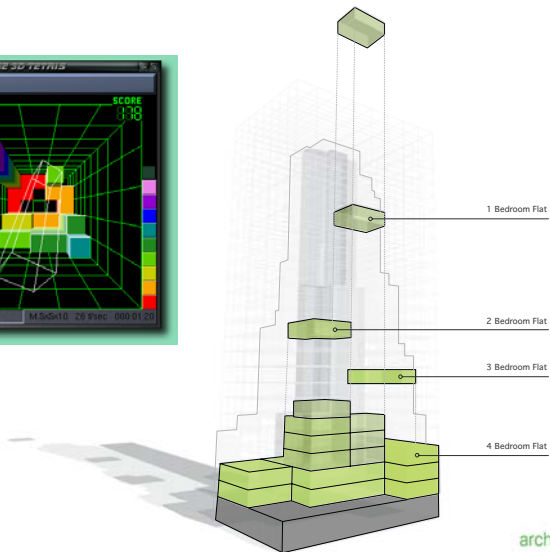
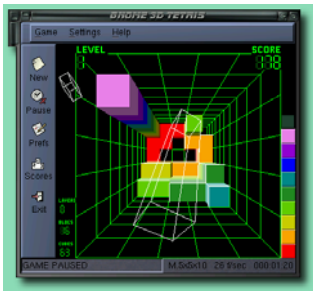


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A NEW PROJECT ...



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