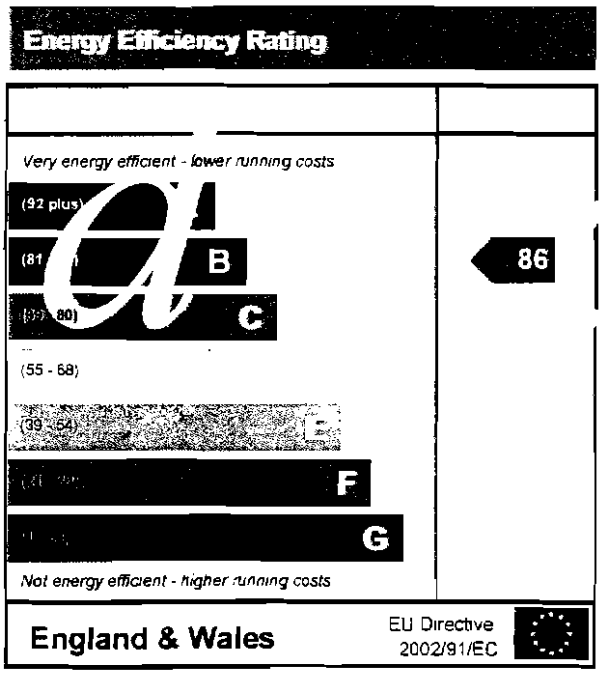
Predicted Energy Assessment

2
(Plot 1) Cunningham Drive
Manchester
M22 5LT

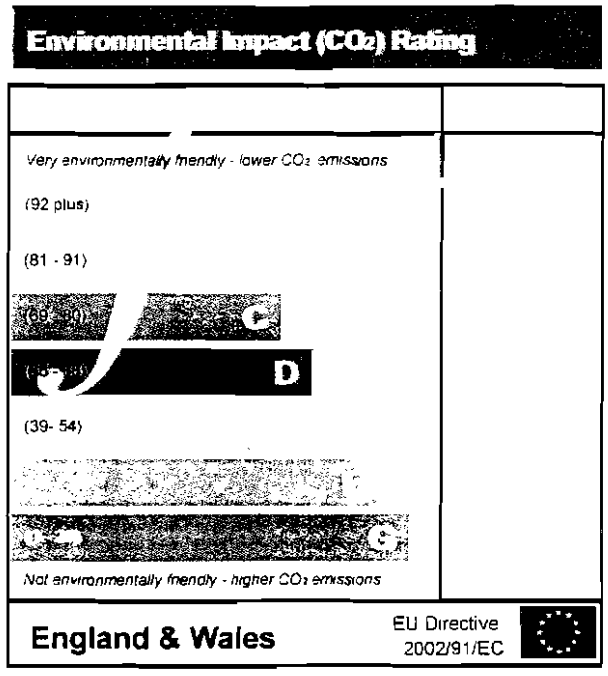
Dwelling type:	Detached house
Date of assessment:	12 September 2008
Produced by:	Mr Nelson Rodrigues
Total floor area:	134m²

This document is a Predicted Energy Assessment required to be included in a Home Information Pack for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, the Pack should be updated to include information about the energy performance of the completed property.

Energy performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO_2) emissions.



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO_2) emissions. The higher the rating the less impact it has on the environment.

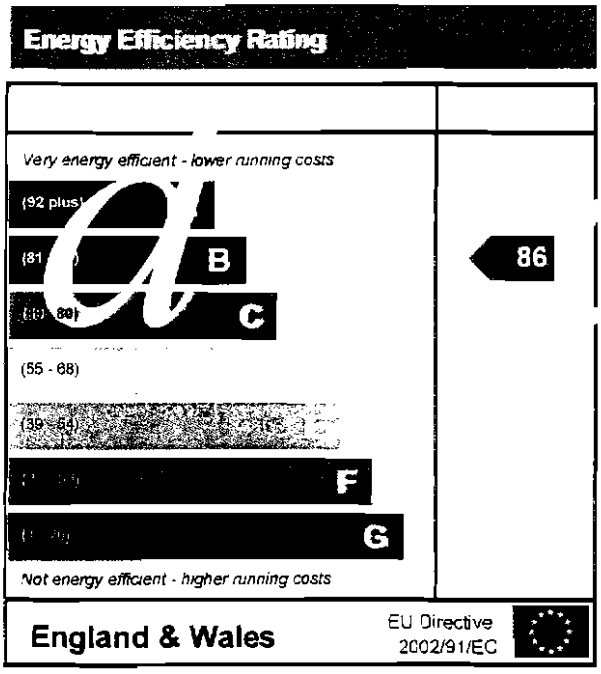
Predicted Energy Assessment

2
(Plot 4) Cunningham Drive
Manchester
M22 5LT

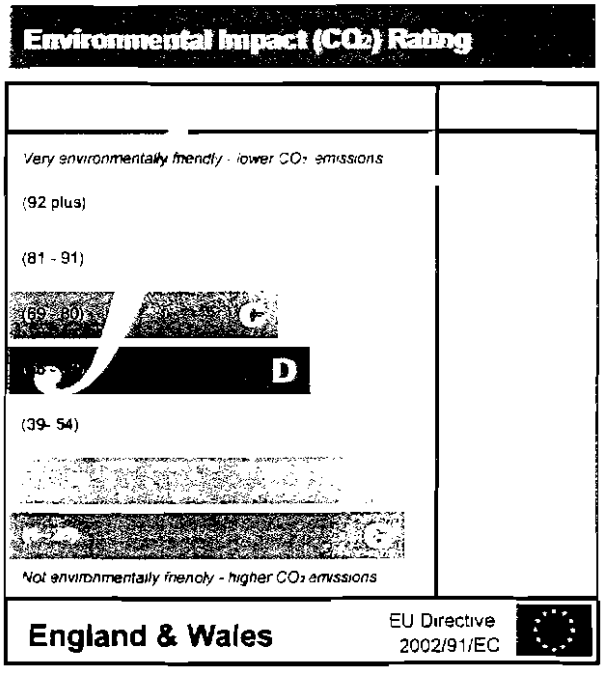
Dwelling type:	Semi-detached house
Date of assessment:	12 September 2008
Produced by:	Mr Nelson Rodrigues
Total floor area:	134m²

This document is a Predicted Energy Assessment required to be included in a Home Information Pack for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, the Pack should be updated to include information about the energy performance of the completed property.

Energy performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO_2) emissions.



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO_2) emissions. The higher the rating the less impact it has on the environment.

NHER

L1A 2006 Regulations Analysis: Design - Draft

This Design Draft submission provides evidence of compliance with Part L of the Building Regulations. It has been carried out by an Authorised SAP Assessor. It has been prepared from plans and specifications and may not reflect the "as built" property

Assessor Name	Mr Nelson Rodrigues	**Assessor Number**	3648
Client	Danson Property Group Ltd		
Date Last Modified	12/09/2008		
Address	2 (Plot 4) Cunningham Drive,Manchester,M22 5LT		

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Criterion 1 - Predicted carbon dioxide emissions from proposed dwelling does not exceed the target

TER	19.37	kg $CO_2/m^2/yr$
DER	14.52	kg $CO_2/m^2/yr$
Criterion 1	Passed	

Criterion 2 - The performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits

Fabric U-values

	Element	Actual U-value	Worst Acceptable U-value	Area weighted avg U-value	Worst Acceptable Area	Pass/Fail
Roofs						
	Roof 1	0.11	0.35	0.11	(0.25)	Passed
	Roof o/a Bay	0.11	0.35	0.11	(0.25)	Passed
Floors						
	Main = Type 1	0.17	0.70	0.17	(0.25)	Passed
	Type 2 = o/garage	0.18	0.70	0.17	(0.25)	Passed
Walls						
	Wall 1	0.19	0.70	0.19	(0.35)	Passed
Openings						

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

	W 1	1.38	3.30	1.50	(2.20)	Passed
Patio Door	D 2	1.67	3.30	1.50	(2.20)	Passed
Front Door	D 3	1.70	3.30	1.50	(2.20)	Passed
	W 4	1.38	3.30	1.50	(2.20)	Passed
	W 5	1.38	3.30	1.50	(2.20)	Passed
	W 6	1.38	3.30	1.50	(2.20)	Passed
	W 7	1.38	3.30	1.50	(2.20)	Passed
	W 8	1.38	3.30	1.50	(2.20)	Passed
	W 9	1.38	3.30	1.50	(2.20)	Passed
	W 10	1.38	3.30	1.50	(2.20)	Passed
	W 11	1.38	3.30	1.50	(2.20)	Passed
	W 12	1.38	3.30	1.50	(2.20)	Passed
	D 13	1.67	3.30	1.50	(2.20)	Passed

Heating and hot water systems

Schedule of Appliance Efficiencies

Main Heating	**Main Heating Efficiency %**	**Min Efficiency for regs. %**	**Pass/Fail**
Mains gas			
Condensing combi Boiler,	93.10	86.00	Passed
1998 or later - Condensing combi, auto ignition			
Secondary Heating			
Mains gas Closed front fire with fan flue	72.00	72.00	Passed

Controls Specification

Main Heating Controls	**Pass/Fail**
Time and temperature zone control	Passed
Boiler Interlock	Passed

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Date Last Modified 12/09/2008

Assessor Name Mr Nelson Rodrigues **Assessor Number** 3648

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Cylinder Specifications

Cylinder Details	**Pass/Fail**
Insulation Details	Passed
Cylinder Thermostat	

Solar water heating

Solar store size compliance with the DHCG

Solar storage volume = 160 litres
Collector area = 8.00 sq m
Daily hot water demand = 138.42 litres

Solar storage volume is equivalent to at least 80% of daily hot water demand — Passed

Fixed internal and external lighting

Internal lighting compliance with paragraph 42 and 43

Paragraph 42 cannot be assessed by this program

Paragraph 43	Number of energy efficient luminaires	10
	Number of standard luminaires	6

Number of energy efficient luminaires needed for compliance is the greater of:

a) One energy efficient fitting per 25m² of floor area; or	6
b) One in four fixed outlets	4

Mechanical ventilation compliance with paragraph 40 and Table 3

Mechanical ventilation system:	No mechanical ventilation present
Specific Fan Power:	N/A
Heat recovery efficiency:	N/A
Air permeability for balanced whole house systems:	N/A

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Date Last Modified 12/09/2008

Assessor Name Mr Nelson Rodrigues **Assessor Number** 3648

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

External lighting compliance with paragraph 45

External lighting present : N/A

NA

Criterion 3 - The dwelling has appropriate passive control measures to limit solar gains

Tendency of dwelling to overheat

Tendency for dwelling to overheat: Not Significant

Tendency must not be 'HIGH' to comply: Passed

Criterion 4 - The performance of the dwelling, as built, is consistent with the *DER*

Fabric construction

Accredited construction details approach

Has been adopted Passed

Schedule of construction details and their reference codes has not been assessed by this program

Site inspection pro-formas and checklists have not been assessed by this program

Air permeability

($m^3/(h/m^2)$ at 50Pa) 4.00 Passed

Sample pressure test results in comparison to design value are not assessed by this program

Commissioning heating and hot water systems

Commissioning completion certificate is not assessed by this program

Criterion 5 - The necessary provisions for energy efficient operations of the dwelling are put in place

Provision of operation and maintenance instructions are not assessed by this program

Unheated common areas in multiple dwellings are not assessed by this program

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Date Last Modified 12/09/2008

Assessor Name Mr Nelson Rodrigues **Assessor Number** 3648

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

NHER

L1A 2006 Regulations Analysis: Design - Draft

This Design Draft submission provides evidence of compliance with Part L of the Building Regulations. It has been carried out by an Authorised SAP Assessor. It has been prepared from plans and specifications and may not reflect the "as built" property.

Assessor Name	Mr Nelson Rodrigues	**Assessor Number**	3648
Client	Danson Property Group Ltd		
Date Last Modified	12/09/2008		
Address	2 (Plot 1) Cunningham Drive,Manchester,M22 5LT		

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Criterion 1 - Predicted carbon dioxide emissions from proposed dwelling does not exceed the target

TER	19.37	kg $CO_2/m^2/yr$
DER	14.52	kg $CO_2/m^2/yr$
Criterion 1	Passed	

Criterion 2 - The performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits

Fabric U-values

	Element	Actual U-value	Worst Acceptable U-value	Area weighted avg U-value	Worst Acceptable Area	Pass/Fail
Roofs						
	Roof 1	0.11	0.35	0.11	(0.25)	Passed
	Roof o/a Bay	0.11	0.35	0.11	(0.25)	Passed
Floors						
	Main = Type 1	0.17	0.70	0.17	(0.25)	Passed
	Type 2 = o/garage	0.18	0.70	0.17	(0.25)	Passed
Walls						
	Wall 1	0.19	0.70	0.19	(0.35)	Passed
Openings						

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

	W 1	1.38	3.30	1.50	(2.20)	Passed
Patio Door	D 2	1.67	3.30	1.50	(2.20)	Passed
Front Door	D 3	1.70	3.30	1.50	(2.20)	Passed
	W 4	1.38	3.30	1.50	(2.20)	Passed
	W 5	1.38	3.30	1.50	(2.20)	Passed
	W 6	1.38	3.30	1.50	(2.20)	Passed
	W 7	1.38	3.30	1.50	(2.20)	Passed
	W 8	1.38	3.30	1.50	(2.20)	Passed
	W 9	1.38	3.30	1.50	(2.20)	Passed
	W 10	1.38	3.30	1.50	(2.20)	Passed
	W 11	1.38	3.30	1.50	(2.20)	Passed
	W 12	1.38	3.30	1.50	(2.20)	Passed
	D 13	1.67	3.30	1.50	(2.20)	Passed

Heating and hot water systems

Schedule of Appliance Efficiencies

Main Heating	**Main Heating Efficiency %**	**Min Efficiency for regs. %**	**Pass/Fail**
Mains gas			
Condensing combi Boiler.	93.10	86.00	Passed
1998 or later - Condensing combi. auto ignition			
Secondary Heating			
Mains gas Closed front fire with fan flue	72.00	72.00	Passed

Controls Specification

Main Heating Controls	**Pass/Fail**
Time and temperature zone control	Passed
Boiler Interlock	Passed

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Date Last Modified 12/09/2008

Assessor Name Mr Nelson Rodrigues **Assessor Number** 3648

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Cylinder Specifications

Cylinder Details	**Pass/Fail**
insulation Details	Passed
Cylinder Thermostat	

Solar water heating

Solar store size compliance with the DHCG

Solar storage volume = 160 litres
Collector area = 8.00 sq m
Daily hot water demand = 138.42 litres

Solar storage volume is equivalent to at least 80% of daily hot water demand — Passed

Fixed internal and external lighting

Internal lighting compliance with paragraph 42 and 43

Paragraph 42 cannot be assessed by this program

Paragraph 43	Number of energy efficient luminaires	10
	Number of standard luminaires	6

Number of energy efficient luminaires needed for compliance is the greater of:

a) One energy efficient fitting per 25m² of floor area; or	6
b) One in four fixed outlets	4

Mechanical ventilation compliance with paragraph 40 and Table 3

Mechanical ventilation system:	No mechanical ventilation present
Specific Fan Power:	N/A
Heat recovery efficiency:	N/A
Air permeability for balanced whole house systems:	N/A

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Date Last Modified 12/09/2008

Assessor Name Mr Nelson Rodrigues **Assessor Number** 3648

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

External lighting compliance with paragraph 45

External lighting present : N/A

NA

Criterion 3 - The dwelling has appropriate passive control measures to limit solar gains

Tendency of dwelling to overheat

Tendency for dwelling to overheat: Not Significant

Tendency must not be 'HIGH' to comply: Passed

Criterion 4 - The performance of the dwelling, as built, is consistent with the *DER*

Fabric construction

Accredited construction details approach

Has been adopted Passed

Schedule of construction details and their reference codes has not been assessed by this program

Site inspection pro-formas and checklists have not been assessed by this program

Air permeability

($m^3/(h/m^2)$ at 50Pa) 4.00 Passed

Sample pressure test results in comparison to design value are not assessed by this program

Commissioning heating and hot water systems

Commissioning completion certificate is not assessed by this program

Criterion 5 - The necessary provisions for energy efficient operations of the dwelling are put in place

Provision of operation and maintenance instructions are not assessed by this program

Unheated common areas in multiple dwellings are not assessed by this program

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

Date Last Modified 12/09/2008

Assessor Name Mr Nelson Rodrigues **Assessor Number** 3648

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control

This draft L1A Regulations Analysis report is for internal purposes only and should not be accepted as evidence of compliance by Building Control