

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1756074M

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Wednesday, 17 July 2024

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



Project summary		
Project name	1440 Hayes Construction Company	
Street address	30 ROBERTSON STREET MUDGE	E 2850
Local Government Area	MID-WESTERN REGIONAL	
Plan type and plan number	Deposited Plan 1282112	
Lot No.	12	
Section no.	-	
No. of residential flat buildings	0	
Residential flat buildings: no. of dwellings	0	
Multi-dwelling housing: no. of dwellings	6	
No. of single dwelling houses	0	
Project score		
Water	✓ 45	Target 30
Thermal Performance	✓ Pass	Target Pass
Energy	√ 71	Target 61
Materials	1 5	Target n/a

Certificate	Prepared	by

Name / Company Name: On Point Building Design

Certificate No.: 1756074M

ABN (if applicable): 54902270203

Description of project

Project address	
Project name	1440 Hayes Construction Company
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Local Government Area	MID-WESTERN REGIONAL
Plan type and plan number	Deposited Plan 1282112
Lot No.	12
Section no.	-
Project type	
No. of residential flat buildings	0
Residential flat buildings: no. of dwellings	0
Multi-dwelling housing: no. of dwellings	6
No. of single dwelling houses	0
Site details	
Site area (m²)	1868
Roof area (m²)	580
Non-residential floor area (m²)	0
Residential car spaces	11
Non-residential car spaces	0

Common area landscape					
Common area lawn (m²)	0				
Common area garden (m²)	105				
Area of indigenous or low water use species (m²)	0				
Assessor details and therma	al loa	ads			
Assessor number	2009	4			
Certificate number	0009	616440			
Climate zone	65				
Project score					
Water	~	45	Target 30		
Thermal Performance	~	Pass	Target Pass		
Energy	V	71	Target 61		
Materials	V	15	Target n/a		

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Description of project

The tables below describe the dwellings and common areas within the project

Multi-dwelling houses

No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
3	84	11	152	1
2	72	9	27	1
	3	3 84	3 84 11	3 84 11 152

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
2	3	80	10	32	1
6	2	87	25	139	1

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
3	3	80	10	32	1

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
4	3	80	10	32	1

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Schedule of BASIX commitments

- 1. Commitments for multi-dwelling housing
 - (a) Dwellings
 - (i) Water
 - (ii) Energy
 - (iii) Thermal Performance and Materials
- 2. Commitments for common areas and central systems/facilities for the development (non-building specific)
 - (b) Common areas and central systems/facilities
 - (i) Water
 - (ii) Energy

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Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carriedout. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for multi-dwelling housing

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	>	>	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		~	~
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		~	V
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and			•
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		-	•
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	V	~	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		>	
(g) The pool or spa must be located as specified in the table.	V	~	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	~	~	~

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	Fixtures			Appliances		Individual pool			Individual spa					
Dwelling no.	All shower- heads	All toilet flushing systems	taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	4 star	4 star	-	-	-	-	-	-	-	-	-	-

	Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top- up	Spa top-up	
All dwellings	Individual water tank (No. 1)	Tank size (min) 2000 liters	To collect run-off from at least: 158 square metres of roof area; 0 square metres of impervious area; 35 square metres of garden and lawn area; and 0 square metres of planter box area.	yes	no	yes	no	no	

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	>	~	>
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		~	>
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		~	•
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		~	~

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(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check	
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	~	~	>	
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:				
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		_		
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		-		
(h) The applicant must install in the dwelling:				
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		_		
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		V	V	
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		_		
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		~		
(j) The applicant must install the photovoltaic system specified for the dwelling under the "Photovoltaic system" heading of the "Alternative energy" column of the table below, and connect the system to that dwelling's electrical system.	~	~	~	

	Hot water	Bathroom ven	tilation system	Kitchen venti	lation system	Laundry ventilation system		
Dwelling no.	Hot water system	Each bathroom Operation control		Each kitchen	Operation control	Each laundry Operation control		
All dwellings	electric instantaneous	individual fan, ducted to façade or roof		individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	

	Cod	oling	Hea	iting	Natural lighting		
Dwelling no.	living areas bedroom areas		living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen	
5	1-phase airconditioning - ducted / 4 star (cold zone)	1-phase airconditioning - ducted / 4 star (cold zone)	1-phase airconditioning - ducted / 4 star (cold zone)	1-phase airconditioning - ducted / 4 star (cold zone)	1	yes	

	Coc	oling	Hea	ting	Natural lighting		
Dwelling no.	living areas bedroom areas		living areas	bedroom areas	No. of bathrooms or toilets	Main kitchen	
All other dwellings			1-phase airconditioning - ducted / 4 star (cold zone)	1-phase airconditioning - ducted / 4 star (cold zone)	2	yes	

	Individual pool			Individual sp	оа	Appliances other efficiency measures				
Dwelling no.	Pool heating system	Pool Pump	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Dishwasher	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	-	electric cooktop & electric oven	-	-	no	yes

	Alternative energy							
Dwelling no.	Photovoltaic system (min rated electrical output in peak kW)	Photovoltaic collector installation	Orientation inputs					
All dwellings	between >10° to <=25° degree to the horizontal	1	N					

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	~		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		>	

(iii) Thermal Performance and Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		~	~
(g) Where there is an in-slab heating or cooling system, the applicant must:	~	~	~
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	>	~	>
(i) The applicant must show on The plans accompanying The development application for The proposed development, The locations of ceiling fans set out in The Assessor Certificate.	V		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		~	

		Thermal loads								
Dwelling no.	Area adjusted heating load (in MJ/m²/yr)	Area adjusted cooling load (in MJ/m²/yr)	Area adjusted total load (in MJ/m²/yr)							
1	146	2	148.000							
2	124	3	127.000							
3	123	3	126.000							
4	125	3	128.000							
5	132	7	139.000							
All other dwellings	138	3	141.000							

		Construction of floors and walls								
Dwelling no.	Concrete slab on ground (m²)			Suspended floor above garage (m²)	Primarily rammed earth or mudbrick walls					
1	95	-	-	-	no					
5	81	-	-	-	no					
6	112	-	-	-	no					
All other dwellings	90	-	-	-	no					

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	Floor types										
	Concrete slab on ground				Suspended flo	or above encl	osed subfloor	Suspended t	Suspended floor above open subfloor		
Dwelling no.	Area (m²) Insulation Low Dematerialisation emissions option		Construction type	Area (m²)	Insulation	Construction type	Area (m²)	Insulation			
1	95	-	-	waffle pod slab	Ì-	-	-	-	-	-	
5	81	-	-	waffle pod slab	-	-	-	-	-	-	
6	112	-	-	waffle pod slab	-	-	-	-	-	-	
All other dwellings	90	-	-	waffle pod slab	-	-	-	-	-	-	

	Floor types	loor types									
	First floor above habitable rooms or mezzanine			Suspended floor above garage Ga			Garage flo	rage floor			
Dwelling no.	Construction type	Area (m²)	Insulation	Construction type	Area (m²)	Insulation	Construction type	Area (m²)	Insulation	Low emissions option	Dematerialisation
All dwellings	-	-	-	-	-	-	concrete slab on ground	22.7	-	-	waffle pod slab

	External walls								
		External v	wall type 1		External wall type 2				
Dwelling no.	Wall type	Area (m²)	Insulation	Low emissions option	Wall type	Area (m²)	Insulation	Low emissions option	
1	brick veneer, frame : timber - H2 treated softwood	26	fibreglass batts or roll	none	framed (fibre cement sheet or boards), frame : timber - H2 treated softwood	51	fibreglass batts or roll	none	
3	brick veneer, frame : timber - H2 treated softwood	28	fibreglass batts or roll	-	-	-	-	-	
5	brick veneer, frame : timber	18	fibreglass batts or roll	-	-	-	-	-	

	External walls							
		External	wall type 1			External	wall type 2	
Dwelling no.	Wall type	Area (m²)	Insulation	Low emissions option	Wall type	Area (m²)	Insulation	Low emissions option
	- H2 treated softwood							
6	brick veneer, frame : timber - H2 treated softwood	46	fibreglass batts or roll	none	framed (fibre cement sheet or boards), frame : timber - H2 treated softwood	12	fibreglass batts or roll	none
All other dwellings	brick veneer, frame : timber - H2 treated softwood	16	fibreglass batts or roll	none	framed (fibre cement sheet or boards), frame : timber - H2 treated softwood	8	fibreglass batts or roll	none

	External walls	xternal walls							
External wall type 3					External wall type 4				
Dwelling no.	Wall type	Area (m²)	Insulation	Low emissions option	Wall type	Area (m²)	Insulation	Low emissions option	
All dwellings	-	-	-	-	-	-	-	-	

	Internal walls								
	Interna	l walls shared witl	h garage		Internal wall type	1	Internal wall type 2		
Dwelling no.	Wall type	Area (m²)	Insulation	Wall type	Area (m²)	Insulation	Wall type	Area (m²)	Insulation
1	plasterboard, frame: timber - H2 treated softwood	24	fibreglass batts or roll	plasterboard, frame: timber - H2 treated softwood	73	-	-	-	-
5	plasterboard, frame: timber - H2 treated softwood	24	fibreglass batts or roll	plasterboard, frame: timber - H2 treated softwood	47	-	-	-	-
6	plasterboard, frame: timber	24	fibreglass batts or roll	plasterboard, frame: timber	62	-	-	-	-

	Internal walls	ernal walls							
	Internal walls shared with garage			Internal wall type 1			Internal wall type 2		
Dwelling no.	Wall type	Area (m²)	Insulation	Wall type	Area (m²)	Insulation	Wall type	Area (m²)	Insulation
	- H2 treated softwood			- H2 treated softwood					
All other dwellings	plasterboard, frame: timber - H2 treated softwood	24	fibreglass batts or roll	plasterboard, frame: timber - H2 treated softwood	63	-	-	-	-

	Ceiling and roo	f								
	Fla	Flat ceiling / pitched roof			Raked ceiling / pitched or skillion roof			Flat ceiling / flat roof		
Dwelling no.	Construction type	Area (m²)	Insulation	Construction type	Area (m²)	Insulation	Construction type	Area (m²)	Insulation	
1	framed - metal roof, frame: timber - H2 treated softwood	69	Ceiling:fibreglass batts or roll,Roof: foil backed blanket	framed - metal roof, frame: timber - H2 treated softwood	24	Ceiling:fibreglass batts or roll,Roof: foil backed blanket	-	-	Ceiling:,Roof:	
6	framed - metal roof, frame: timber - H2 treated softwood	86	Ceiling:fibreglass batts or roll,Roof: foil backed blanket	framed - metal roof, frame: timber - H2 treated softwood	49	Ceiling:fibreglass batts or roll,Roof: foil backed blanket	-	-	Ceiling:,Roof:	
All other dwellings	framed - metal roof, frame: timber - H2 treated softwood	58	Ceiling:fibreglass batts or roll,Roof: foil backed blanket	framed - metal roof, frame: timber - H2 treated softwood	30	Ceiling:fibreglass batts or roll,Roof: foil backed blanket	-	-	Ceiling:,Roof:	

	Glazing type			Frame types					
Dwelling no.	Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)	
1	16.5	-	-	16.5	-	-	-	-	
5	11.76	-	-	11.76	-	-	-	-	
6	24.51	-	-	24.51	-	-	-	-	

		Glazing type			Frame types				
Dwelling no.	Single glazing (m²)	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m²)	uPVC frames (m²)	Steel frames (m²)	Composite frames (m²)	
All other dwellings	9.66	-	-	9.66	-	-	-	Ì-	

2. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		•	V
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	>	~	\
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	~	>	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		~	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		~	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		~	V

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		>	>
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		>	>
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	•	>	•

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Central energy systems	Туре	Specification
Other	-	-

Notes

- 1. In these commitments, "applicant" means the person carrying out the development.
- 2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
- 3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
- 4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
- 5. If a star or other rating is specified in a commitment, this is a minimum rating.
- 6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE:

 NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

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- 1. Commitments identified with a "" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
- 2. Commitments identified with a "" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
- 3. Commitments identified with a "" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfillment it is required to monitor in relation to the building or part, has been fulfilled).

Department of Planning, Housing and www.basix.nsw.gov.au Version: 4.03 / EUCALYPTUS_03_01_0 Certificate No.: 1756074M Wednesday, 17 July 2024 Infrastructure

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