# **BASIX**<sup>°</sup>Certificate

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

# Multi Dwelling

Certificate number: 1729497M\_03

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: Tuesday, 02 April 2024 To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	142-146 Pitt Rd, North Curl Curl N	SW 2099_03
Street address	142-146 PITT ROAD NORTH CU	RL CURL 2099
Local Government Area	NORTHERN BEACHES	
Plan type and plan number	Deposited Plan DP394337	
Lot no.	29	
Section no.	-	
No. of residential flat buildings	1	
Residential flat buildings: no. of dwellings	11	
Multi-dwelling housing: no. of dwellings	0	
No. of single dwelling houses	0	
Project score		
Water	40	Target 40
Thermal Performance	V Pass	Target Pass
Energy	67	Target 67
Materials	<ul><li>✓ -100</li></ul>	Target n/a

If any changes to this BASIX certificate are required, please contact IGS with following details:

- Project reference: 142-146 Pitt Rd, North Curl Curl NSW 2099
- Contact number: 0430 108 801

### **Certificate Prepared by**

Name / Company Name: IGS

#### ABN (if applicable): 68163019029

# **Description of project**

Project address	
Project name	142-146 Pitt Rd, North Curl Curl NSW 2099_03
Street address	142-146 PITT ROAD NORTH CURL CURL 2099
Local Government Area	NORTHERN BEACHES
Plan type and plan number	Deposited Plan DP394337
Lot no.	29
Section no.	-
Project type	
No. of residential flat buildings	1
Residential flat buildings: no. of dwellings	11
Multi-dwelling housing: no. of dwellings	0
No. of single dwelling houses	0
Site details	
Site area (m²)	1299
Roof area (m²)	950
Non-residential floor area (m <sup>2</sup> )	-
Residential car spaces	20
Non-residential car spaces	-

Common area landscape		
Common area lawn (m <sup>2</sup> )	185	
Common area garden (m <sup>2</sup> )	123	
Area of indigenous or low water use species (m <sup>2</sup> )	120	
Assessor details and therm	al loads	
Assessor number	DMN16/1757	
Certificate number	0009118220	
Climate zone	56	
Project score		
Water	40	Target 40
Thermal Performance	V Pass	Target Pass
Energy	67	Target 67
Materials	-100	Target n/a

## **Description of project**

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

### Residential flat buildings - Building1, 11 dwellings, 3 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	ndition€ a (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)		Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)	Dwelling no.	No. of bedrooms	nditioned a (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
L0.01	2	106.1	5.7	0	0	L0.04	3	151.3	5.3	0	0	l	L1.05	2	101.2	6.2	0	0	L1.06	3	102.1	4.8	26	0
L1.07	3	127.3	3.3	11	0	L1.08	3	116.8	4.2	18	0	Γ	L1.09	3	111.2	6.9	18	0	L2.10	3	162.1	3.8	0	0
L2.11	4+	171.7	3.2	0	0	TH.02	3	148.4	3.4	0	0	-	TH.03	3	148.4	3.4	0	0				-		

## **Description of project**

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

### Common areas of unit building - Building1

Common area	Floor area (m²)	Common area	Floor area (m²)	Common area	Floor area (m <sup>2</sup> )
Lift bank (No. 1)	-	Undercover car park area	729	Switch room	5
Garbage room	33	Community room	24	Plant or service room	56
Ground floor lobby type	76	Hallway/lobby type	46		

# **Schedule of BASIX commitments**

1. Commitments for Residential flat buildings - Building1

(a) Buildings

(i) Materials

(b) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Performance

(c) Common areas and central systems/facilities

(i) Water

(ii) Energy

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

### 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 Residential flat buildings - Building1

### (a) Buildings

(i) Materials	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) 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 "Floor types", "External wall types", "Internal wall types", "Ceiling and roof types", "Frames" and "Glazing" tables below.			¢
(b) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all specifications included in the tables below.		<b>~</b>	
(c) The applicant must construct the floors, walls, roof, ceiling and roof, windows, glazed doors and skylights of the development in accordance with the specifications listed in the tables below. In the case of glazing, a 5% variance from the area values listed in the "Frames" and "Glazing" tables is permitted.	~	~	٢
(d) The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the below tables.			>

	Floor types								
Floor type	Area (m2)	Insulation	Low emissions option						
concrete slab on ground, frame:	634.5	-	none						
suspended floor above enclosed subfloor, frame: suspended concrete slab	211.5	-	none						
floors above habitable rooms, frame: suspended concrete slab	1057.5	-	none						
suspended floor above garage, frame: suspended concrete slab	211.5	-	none						

External wall types									
External wall type	Construction type	Area (m2)	Low emissions option	Insulation					
External wall type 1	cavity brick,frame:light steel frame	450	none	-					

External wall types									
External wall type	Constru	iction type	Area (m2)		Low emissions option		Insulation		
External wall type 2	framed (r steel fran	metal clad),frame:light ne	260		none		-		
Internal wall types									
			Interna	al wall types	·		^		
Internal wall type		Construction type	Interna	al wall types Area (m2)		Insulat	ion		
Internal wall type Internal wall type 1		Construction type cavity brick wall, frame:lig				Insulat	ion		

Reinforcement concrete frames/columns								
Building has reinforced concrete frame/columns?	Volume (m³)	Low emissions option						
-	-	-						

	Ceiling and roof types								
Ceiling and roof type	Area (m²)	Roof Insulation	Ceiling Insulation						
concrete - plasterboard internal, frame: light steel frame	950	-	-						

	Glazing types			Frame types							
Single glazing (m <sup>2</sup> )	Double glazing (m²)	Triple glazing (m²)	Aluminium frames (m²)	Timber frames (m <sup>2</sup> )	uPVC frames (m²)	Steel frames (m <sup>2</sup> )	Composite frames (m²)				
-	260	-	260	-	-	-	-				

### (b) 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.		<	>
(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		<b>~</b>	<ul> <li>Image: A set of the set of the</li></ul>
(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.		✓	<ul> <li>Image: A set of the set of the</li></ul>
(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.	~	~	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		<b>~</b>	
(g) The pool or spa must be located as specified in the table.	~	~	
(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.	~	~	~

	Fixtures			Appli	ances		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
L0.01	4 star (> 4.5 but <= 6 L/min)	4 star	6 star	6 star	On demand HW recirculation	2 star	5 star	-	-	-	-	-	-	-

	Fixtures			Appli	ances		Indivi	idual pool			ndividual spa	a	
Dwelling no.	All shower- heads	All toilet flushing systems		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
	4 star (> 4.5 but <= 6 L/min)	4 star	6 star	 	not specified	5 star	-	-	-	-	-	-	-

			Alternative water sou	irce				
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top- up	Spa top-up
L1.06, L1.07, L1.08, L1.09	Central water tank (No. 1)	See central systems	See central systems	yes	-	-	-	-
L1.06, L1.07, L1.08, L1.09	No alternative water supply	-	-	-	-	-	-	-
All other dwellings	No alternative water supply	-	-	-	-	-	-	-
All other dwellings	No alternative water supply	-	-	-	-	-	-	-

(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.		~	~

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(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check	
(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.		~	~	
(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		<b>~</b>		
(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.		<b>~</b>		
(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;		<b>~</b>		
(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		<b>~</b>	~	
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		<ul> <li>✓</li> </ul>		
<ul> <li>(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".</li> </ul>		<b>_</b>		

	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		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	interlocked to light	

		Co	oling			Hea	ting				Natural lig	hting
Owelling no.	living areas bedroom areas		living areas		bedro	oom areas	No. of bathrooms or toilets			Main kitchen		
ll dwellings	1-phase airc ducted / EE	conditioning - R 3.0 - 3.5	1-phase aircon ducted / EER 3		1-phase aircondi ducted / EER 3.0			se airconditionir d / EER 3.0 - 3.9		)		-
	I	ndividual pool		Indiv	ridual spa			Appliances	other effic	ciency	measures	
	Pool heating system	Pool Pump	Timer	Spa heating system	) Timer	Kitchen cooktop/ov	ven	Dishwasher	Cloth dryer		Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
ll - wellings		-	-	-	-	electric cool electric over	•	4 star	4 star		-	-
iii) Thermal F	Performance								Show on DA plans	-	how on CC/CD lans & specs	C Certifier check
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(iii) Thermal Performance	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	~		
(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.		<b>~</b>	

	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)					
L0.01	0.9	13.3	14.200					
L0.04	0.8	19.1	19.900					
L1.05	22.9	11.3	34.200					
L1.06	1	18.4	19.400					
L1.07	28.4	18.8	47.200					
L1.08	32.1	10.8	42.900					
L1.09	31.8	11.4	43.200					
L2.10	5.8	16.6	22.400					
L2.11	14.3	16.5	30.800					
TH.02	0.4	10.9	11.300					
All other dwellings	0.4	10.7	11.100					

### (c) 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.		<b>~</b>	>
(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.	<b>~</b>	<b>~</b>	
(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.		<b>~</b>	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		<b>~</b>	~
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		<b>~</b>	>

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	4 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for)
Central water tank - rainwater or stormwater (No. 1)	5000	To collect run-off from at least: - 700 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 188 square metres of common landscaped area on the site
Fire sprinkler system (No. 1)	-	-	-

(ii) Energy	Show on	Show on CC/CDC	Certifier
	DA plans	plans & specs	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.		>	~

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	>	<b>~</b>	~

	Common area	ventilation system	common area lighting			
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/ BMS	
Lift bank (No. 1)	-	-	light-emitting diode	connected to lift call button	-	
Undercover car park area	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	light-emitting diode	motion sensors	-	
Switch room ventilation (supply + thermostatically exhaust)		thermostatically controlled	light-emitting diode	manual on / manual off	-	
Garbage room	ventilation exhaust only	-	light-emitting diode	motion sensors	-	
Community room ventilation (supply + time clock or exhaust)		time clock or BMS controlled	light-emitting diode	motion sensors	-	
Plant or service room	ventilation (supply + exhaust)	thermostatically controlled	light-emitting diode	manual on / manual off	-	
Ground floor lobby type	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	-	
Hallway/lobby type	ventilation (supply + exhaust)	time clock or BMS controlled	light-emitting diode	time clock and motion sensors	-	

Central energy systems	Туре	Specification
Lift bank (No. 1)		Number of levels (including basement): 3 number of levels from the bottom of the lift shaft to the top of the lift shaft: 4 number of lifts: 1 lift load capacity: >= 1001 kg but <= 1500kg
Central hot water system (No. 1)	sourced	Piping insulation (ringmain & supply risers): (a) Piping external to building: R0.6 (~25 mm); (b) Piping internal to building: R0.6 (~25 mm) (c) Unit Efficiency: 2.5 < COP <= 3.0

### 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.		<b>~</b>	•
(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.	~	<b>~</b>	
(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.		<b>~</b>	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		<b>~</b>	~
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		<b>~</b>	~

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	4 star	no common laundry facility

(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>•</b>	>
(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.	<b>~</b>	<b>~</b>	~

Central energy systems	Туре	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 7 peak kW
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

- 1. Commitments identified with a "V" 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).