

NABERS Embodied emissions materials form

New non-residential developments must complete this form

From 1 October 2023, all new non-residential developments must report on embodied emissions using this form in NSW, where the NSW government's State Environmental Planning Policy (Sustainable Buildings SEPP) 2022 applies. You must disclose the amounts of key materials at the development application and construction certificate stages.

[More on the Sustainable Buildings SEPP](#)

Embodied carbon emissions are generated across the full life cycle of a building from "cradle to grave". Embodied carbon made up 16% of the whole-of-life carbon footprint of Australia's buildings in 2019 [1]. The purpose of this form is to report on material quantities only, to support project team discussions about potential reduction in emissions from key materials. The form does not include embodied emissions factors. This reporting form will be updated to reflect the NABERS Embodied Carbon tool when it's available in 2024.

Step 1: About the building

In the 'About the building' tab, you will add the location, function, and type of building you are planning to construct. You will also need to add information that describes the building, including gross floor area, number of floors, area of carpark, and more. Collecting this information will allow the NSW Government to compare similar buildings.

Step 2: Quantity of materials

In the 'Quantity of materials' tab, you will add the amounts of materials that you will use to construct your building. You only need to complete those fields relevant to your building. Leave fields that aren't relevant to your building blank. We recognise that there will be uncertainty, particularly at DA stage, so please use your best estimates where information is unknown (e.g., based on past projects).

How much do I need to include?

You must include all parts of the building delivered by the main contractor, covering at least 80% of the total materials bill. For example, if you spent \$100,000 on materials, you need to include the material amounts of at least \$80,000 of those materials in this form.

Wherever possible, consider materials costs only, not labour, plant or equipment. However, where you cannot split out the materials costs, please simply be consistent in the way the costs are reported throughout the spreadsheet.

Enter the **quantity of materials** (excluding labour, plant, equipment, margins and taxes) for:

- (1) Structure (substructure and superstructure) within the envelope of the building. Also include any ancillary buildings that are necessary for the main building to function (for example, plant that is in a separate building).
- (2) Envelope (cladding, curtain walls, roofing, windows, doors etc.)
- (3) Permanent internal walls and doors. At minimum, this should include all structural walls.
- (4) External works (hard landscaping, carparks, etc.) outside of the building envelope.

Enter the **cost of materials** (excluding labour, plant, equipment, margins and taxes) for:

- (5) Building services (mechanical, electrical, plumbing, vertical transport, etc.) required to run the core of the building. Exclude special equipment required by a particular tenant.

You must enter the amounts of materials in SI units (commonly known as the metric system). These are generally consistent across the various products on the market. However, you might need to convert the units of some materials (for example, convert volume to kg).

Step 3: Certifier details

In the 'Certifier' tab you will add the details of the person who has entered data, and the person who has certified the accuracy of the data. The certifier must be a quantity surveyor, designer, engineer or NABERS assessor.

Step 4: Attach to approval

Attach this Excel spreadsheet to your development application or construction certificate application.

The data collected in this form will be used by the NSW Government to inform future policy development.

Help!

If you have general questions about reporting on the embodied emissions of your building, you should contact your local council or consent authority.

If you have technical questions about this spreadsheet, please contact NABERS:
nabers@environment.nsw.gov.au

[1] Green Building Council of Australia, 2021, <https://new.gbca.org.au/news/gbca-news/gbca-and-thinkstep-release-embodied-carbon-report/>

Step 1: About the building

Fill out blue cells

Building location and site data	Value	Unit	Note	Comment
Building address	806-812 Windsor Road			
Postcode	2155		Required	Postcode of building
Town/city	Rouse Hill		Required	Town/city/suburb/region of the building site
Town/city		km	Enter for rural/regional locations only	Declare the shortest route by road to your site from the centre of your nearest major city (> 100,000 people). The route must be traversable by a semitrailer truck.
Project stage	Development Application		Required	Stage of development
New build or major renovation?	New build		Required	
Brownfield or greenfield site?	Greenfield		Required	

Floor area by NCC building classification	Gross (GFA)	Net (NLA/NSA/UPA)	Unit	Note
Please enter all floor areas relevant to your building. Leave areas blank if not applicable. Please enter Gross Floor Area (GFA) for all building classifications. Please also enter the corresponding net area (Net Lettable Area, Net Sellable Area or Usable Floor Area) where it is commonly used for that building classification.				
Class 1a: Detached residential buildings			m ²	Required for Class 1a: Detached residential houses, townhouses
Class 1b: Boarding houses and hostels			m ²	Required for Class 1b: Boarding house, guest house, hostel
Class 2: Multi-unit residential buildings	68,906		m ²	Required for Class 2: Multi-unit residential, including apartment buildings
Class 3: Other residential buildings			m ²	Required for Class 3: Other residential buildings
Class 4: Residential inside non-residential			m ²	Required for Class 4: Residential building inside a non-residential building, e.g., caretaker residence
Class 5: Office buildings			m ²	Required for Class 5: Office building
Class 6: Retail buildings			m ²	Required for Class 6: Retail building, e.g., shop, restaurant, cafe
Class 7a: Carparks	31,015		m ²	Required for Class 7a: Carparks
Class 7b: Warehouse-type buildings			m ²	Required for Class 7b: Warehouses, wholesalers and storage facilities
Class 8: Industrial buildings			m ²	Required for Class 8: Industrial buildings, e.g., factories and workshops
Class 9a: Healthcare buildings			m ²	Required for Class 9a: Healthcare, e.g., hospitals, clinics, day surgeries
Class 9b: Civic buildings			m ²	Required for Class 9b: Civic buildings, e.g., theatres, civic centres, train stations
Class 9c: Aged care and personal care buildings			m ²	Required for Class 9c: Aged care and personal care
Class 10a: Non-habitable buildings			m ²	Required for Class 10a: Non-habitable buildings including sheds, carports and private garages
Class 10b: Miscellaneous structures			m ²	Required for Class 10b: Miscellaneous structures, including fences, masts, antennas, retaining walls and swimming pools
Class 10c: Bushfire shelters			m ²	Required for Class 10c: Bushfire shelters not attached to a Class 1a building
Total	99,921	0	m²	Required: Sum of m ² inputs must be more than 0.

Project information	Value	Unit	Note
Total cost of project	355,351,252	AUD excl. GST	Required
Building design life	50	years	Optional
Estimated envelope life		years	Optional
Estimated replacement cycle for mechanical services		years	Optional
Estimated replacement cycle for vertical transportation		years	Optional

Dimensions of the building and the site	Value	Unit	Note
Site area	35,899	m ²	Required
Shared services or infrastructure	Yes		Required
Building footprint area	10,108	m ²	Required
Typical floor area (if different to building footprint area)		m ²	Only needed if different to row above
Typical floor perimeter	1,827	m	Required
Area of external carpark (not included in GFA)	0	m ²	Required. Enter 0 if not applicable.
Area of external hardstand (not included in GFA)	12,888	m ²	Required. Enter 0 if not applicable.
Area of other hard landscaping (not included in GFA)	12,388	m ²	Required. Enter 0 if not applicable.
Number of floors/stories above ground, including ground floor	8	no.	Required
Number of floors/stories below ground	3	no.	Required. Enter 0 if not applicable.
Number of floors/stories of car parking	3	no.	Required. Enter 0 if not applicable.
Total height above ground		m	Required

Structural material choices	Value	Unit	Note
Foundation type	Slab-on-ground		Required
Frame type (dominant)	Reinforced concrete		Required
Suspended floor type (typical)	Reinforced concrete		Only needed for multi-storey buildings
Describe low carbon materials specified in your building (e.g. green concrete, low carbon bricks)	NI		Required
Describe recycled content specified in your building (e.g. recycled steel)	NI		Required

Step 2: Quantity of materials

Complete all blue cells that are applicable to the building. **Leave items that aren't applicable blank.**

Fill out blue cells

Material category	Sub-category 1	Sub-category 2	Sub-category 3	Value	Unit of measure	Comment	AQIS ACMM Code	ICMS3 (Level 3 Codes Construction)
Structure								
The structural parts of the building that are below ground (substructure) and above ground (superstructure). This includes fill below the substructure, foundations, basement levels, suspended floors, wall structure, roof structure, stairs, lift shafts and balconies. It excludes external areas such as handstands, carparks, patios, etc.								
Coverage of structural material spend	-	-	-	80	%	Required: Coverage of gross for structural elements entered below. Minimum requirement = 80%. Exclude head contractor preliminaries and margins.		
Concrete in-situ	>10 MPa	-	-	-	m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Concrete in-situ	>10 MPa to <20 MPa	-	-	-	m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Columns	-	-	-	8,076,980.0	\$	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Upper Floors	-	-	-	42,105,870.0	\$	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Staircase	-	-	-	4,614,310.0	\$	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Concrete in-situ	>50 MPa to <80 MPa	-	-	-	m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Concrete in-situ	>80 MPa to <80 MPa	-	-	-	m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Concrete in-situ	>80 MPa to <100 MPa	-	-	-	m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	01_SB or 02-11	02 or 03
Concrete in-situ	>100 MPa	-	-	-	m ³	Please enter reinforcing steel in relevant line items below. If not known at DA stage, please make your best estimate. If not known at CC stage, please ask your supplier.	01_SB or 02-11	02 or 03
Concrete pre-cast panel	-	-	-	-	m ²			
Concrete block	Hollow core	-	-	-	m ³	Enter as cubic metres , calculated as (area in m ²) * (thickness in mm / 1000).	01_SB	02 or 03
Concrete block/brick	Solid	-	-	-	m ³	Enter as cubic metres , calculated as (area in m ²) * (thickness in mm / 1000).	01_SB	02 or 03
Concrete block/brick	Solid AAC	-	-	-	m ³	Solid Aerated Autoclaved Concrete (AAC) block. Enter as cubic metres , calculated as (area in m ²) * (thickness in mm / 1000).	01_SB	02 or 03
Mortar	-	-	-	-	kg		01_SB	02 or 03
Reinforcing steel	Bar & mesh	-	-	-	t			
Reinforcing steel	Fibre & strand	-	-	-	kg			
Structural steel	Hot rolled structural	-	-	-	t	Examples include universal beams, universal columns and welded beams	01_SB	02 or 03
Structural steel	Cold formed structural	-	-	-	t	Examples include C purlins, Z purlins and all light gauge steel framing	01_SB	02 or 03
Structural steel	Other welded structural	-	-	-	t		01_SB	02 or 03
Structural steel	Plate	-	-	-	t	Include any allowance for connections here	01_SB	02 or 03
Structural steel	Sheet	-	-	-	t		01_SB	02 or 03
Stainless steel	-	-	-	-	t	Primarily for engineered timber structure connections	02_11	02 or 03
Reinforced concrete piles	Concrete	-	-	-	m ³	Please enter reinforcing steel in the line below. If not known at DA stage, please make your best estimate. If not known at CC stage, please ask your supplier.	01_SB	02 or 03
Reinforced concrete piles	Steel reinforcing	-	-	-	kg	If not known at DA stage, please make your best estimate. If not known at CC stage, please ask your supplier.	01_SB	02 or 03
Steel piles	-	-	-	-	t	Where concrete and reinforcing steel are also used, enter these in the rows above.	01_SB	02 or 03
Timber poles/piles	-	-	-	-	m ³	Where concrete and reinforcing steel are also used, enter these in the rows above.	01_SB	02 or 03
Timber (solid)	Sawn softwood	-	-	-	m ³		02_11	02 or 03
Timber (solid)	Sawn hardwood	-	-	-	m ³		02_11	02 or 03
Timber (engineered)	CLT	-	-	-	m ³		02_11	02 or 03
Timber (engineered)	Glulam	-	-	-	m ³		02_11	02 or 03
Timber (engineered)	LVL	-	-	-	m ³		02_11	02 or 03
Timber (engineered)	OSB	-	-	-	m ³		02_11	02 or 03
Brick	Heat cured	-	-	-	m ³	Enter as cubic metres , calculated as (area of wall in m ²) * (thickness in mm / 1000).	02_11	02 or 03
Structural Insulated Panel (SIP)	Steel outer	-	-	-	m ²	Enter as cubic metres , calculated as (area of wall in m ²) * (thickness in mm / 1000).	01_SB	02 or 03
Structural Insulated Panel (SIP)	Aluminium outer	-	-	-	m ²		01_SB	02 or 03
Structural Insulated Panel (SIP)	Engineered timber outer	-	-	-	m ²		01_SB	02 or 03
Fill	-	-	-	-	t	Include purchased material only. Exclude site-won material.	01_SB	01
Sand & gravel	-	-	-	-	t	Include purchased material only. Exclude site-won material and sand/gravel in concrete.	01_SB	01
Waterproofing membrane	Bituminous	-	-	-	m ²		01_SB	01 or 02 or 03
Waterproofing membrane	Polyethylene	-	-	-	m ²		01_SB	01 or 02 or 03
Other structural (Describe and add unit >>)						Please enter a description for any structural material that does not fit a predefined classification		
Other structural (Describe and add unit >>)						Please enter a description for any structural material that does not fit a predefined classification		
Other structural (Describe and add unit >>)						Please enter a description for any structural material that does not fit a predefined classification		

Envelope

The skin of the building that separates the internal building from the external environment. This includes the roof cladding, wall cladding, windows, doors and internal/external shading. It also includes insulation and the internal wall lining of envelope walls.

Coverage of envelope material spend	-	-	-	80	%	Required: Coverage of gross for the envelope items you have entered below. Minimum requirement = 80%. Exclude head contractor preliminaries and margins.		
Roof	-	-	-	6,921,480	\$	Enter as m ² of roof area. Exclude allowances for overlap in the roofing sheets. This row includes all metal-coated and pre-painted steel sheets where steel is the base metal. Examples include: galvanneal steel, zinc-aluminum (zincalume) coated steel and zinc-aluminum-magnesium (ZAM) coated steel, whether painted or unpainted.	05_RF	03 or 04
Roof cladding	Profiled aluminium	-	-	-	m ²	Enter as m ² of roof area. Exclude allowances for overlap in the roofing sheets. This row also includes pre-painted aluminium sheets.	05_RF	03 or 04
Roof cladding	Profiled zinc	-	-	-	m ²	Enter as m ² of roof area. Exclude allowances for overlap in the roofing sheets. This row also includes pre-painted zinc sheets.	05_RF	03 or 04
Roof cladding	Membrane	-	-	-	m ²	Enter as m ² of roof area. Exclude allowances for overlap in the membrane sheets.	05_RF	03 or 04
Roof cladding	Tiles (traditional clay)	-	-	-	m ²	Enter as m ² of roof area. Exclude allowances for overlap between the tiles.	05_RF	03 or 04
Roof cladding	Tiles (concrete)	-	-	-	m ²	Enter as m ² of roof area. Exclude allowances for overlap between the tiles.	05_RF	03 or 04
Roof cladding	Other (Please describe >>)					Please enter a description for any roofing that does not fit a predefined classification	05_RF	03 or 04
External Wall	-	-	-	49,027,150	\$	Enter as m ² of wall area. Heat-cured bricks use a kiln or furnace to raise the brick temperature above ambient temperature during curing process.	06_EW	03 or 04
Wall cladding	Bricks (air dried)	-	-	-	m ²	Enter as m ² of wall area. Air-dried bricks are cured using ambient temperature.	06_EW	03 or 04
Wall cladding	Bricks (under fired)	-	-	-	m ²	Enter as m ² of wall area.	06_EW	03 or 04
Wall cladding	Bricks (concrete)	-	-	-	m ²	Enter as m ² of wall area.	06_EW	03 or 04
Wall cladding	Mortar and render	-	-	-	kg		06_EW	03 or 04
Wall cladding	Profiled steel	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for overlap in the cladding sheets, offsets, etc. This row includes all metal-coated and pre-painted steel sheets where steel is the base metal. Examples include: galvanneal steel, zinc-aluminum (zincalume) coated steel and zinc-aluminum-magnesium (ZAM) coated steel, whether painted or unpainted.	06_EW	03 or 04
Wall cladding	Profiled aluminium	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for overlap in the cladding sheets, offsets, etc. This row also includes pre-painted aluminium sheets.	06_EW	03 or 04
Wall cladding	Profiled zinc	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for overlap in the cladding sheets, offsets, etc. This row also includes pre-painted zinc sheets.	06_EW	03 or 04
Wall cladding	GRC cladding	-	-	-	m ²	Enter as m ² of wall area. GRC = Glass Reinforced Concrete.	06_EW	03 or 04
Wall cladding	Timber weatherboards	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for overlap between weatherboards, offsets, etc.	06_EW	03 or 04
Wall cladding	Fibre cement board	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for offsets, etc.	06_EW	03 or 04
Wall cladding	Terraotta	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for offsets, etc.	06_EW	03 or 04
Wall cladding	Brick tiles / veneers	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for offsets, etc.	06_EW	03 or 04
Wall cladding	Plasterboard	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for offsets, etc. Include both external wall linings and internal wall linings for envelope walls.	12_WF or 06_EW	03 or 04
Wall cladding	Plywood	-	-	-	m ²	Enter as m ² of wall area. Exclude allowances for offsets, etc. Include both external wall linings and internal wall linings for envelope walls.	12_WF or 06_EW	03 or 04
Wall cladding	Other (Please describe >>)					Please enter a description for any wall cladding that does not fit a predefined classification	06_EW or 12_WF	03 or 04
Windows	Aluminium frame	Double glazed	-	4,037,530	\$	Include all double glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Aluminium frame	Triple glazed	-	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
External Doors	-	-	-	4,614,320	\$	Include all single glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Timber frame	Double glazed	-	-	m ²	Include all double glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Timber frame	Triple glazed	-	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	uPVC frame	Single glazed	-	-	m ²	Include all single glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	uPVC frame	Double glazed	-	-	m ²	Include all double glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	uPVC frame	Triple glazed	-	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Frameless	Single glazed	-	-	m ²	Include all single glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Frameless	Double glazed	-	-	m ²	Include all double glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Frameless	Triple glazed	-	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	07_WW or 08_ED	03 or 04
Windows & doors	Other (Please describe >>)					Please enter a description for any window or door that does not fit a predefined classification	07_WW or 08_ED	03 or 04
Curtain wall	Single skin facade	Glazed panel	Single glazed	-	m ²	Include all single glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Curtain wall	Single skin facade	Glazed panel	Double glazed	-	m ²	Include all double glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Curtain wall	Single skin facade	Glazed panel	Triple glazed	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Curtain wall	Single skin facade	Opaque panel	Aluminium cladding	-	m ²		06_EW	03 or 04
Curtain wall	Single skin facade	Opaque panel	GRC cladding	-	m ²	GRC = Glass-fibre Reinforced Concrete	06_EW	03 or 04
Curtain wall	Single skin facade	Opaque panel	Insulated shadow box	-	m ²		06_EW	03 or 04
Curtain wall	Single skin facade	Opaque panel	Brick cladding	-	m ²		06_EW	03 or 04
Curtain wall	Single skin facade	Opaque panel	Stone cladding	-	m ²		06_EW	03 or 04
Curtain wall	Double skin facade	Glazed panel	Single glazed	-	m ²	Please declare all double-skin facade area in this section. Please declare as the area of the curtain wall and do not enter the inner and outer skins twice.	06_EW	03 or 04
Curtain wall	Double skin facade	Glazed panel	Double glazed	-	m ²	Include all single glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Curtain wall	Double skin facade	Glazed panel	Triple glazed	-	m ²	The type of glazing refers to the building's envelope wall, not including the outer skin	06_EW	03 or 04
Curtain wall	Double skin facade	Opaque panel	Aluminium cladding	-	m ²		06_EW	03 or 04
Curtain wall	Double skin facade	Opaque panel	GRC cladding	-	m ²	GRC = Glass-fibre Reinforced Concrete	06_EW	03 or 04
Curtain wall	Double skin facade	Opaque panel	Insulated shadow box	-	m ²		06_EW	03 or 04
Curtain wall	Double skin facade	Opaque panel	Brick cladding	-	m ²		06_EW	03 or 04
Curtain wall	Double skin facade	Opaque panel	Stone cladding	-	m ²		06_EW	03 or 04
Curtain wall	Other (Please describe >>)					Please enter a description for any curtain wall that does not fit a predefined classification	06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Glazed section	Single glazed	-	m ²	Include all single glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Glazed section	Double glazed	-	m ²	Include all double glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Glazed section	Triple glazed	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Opaque section	Aluminium cladding	-	m ²		06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Opaque section	GRC cladding	-	m ²	GRC = Glass-fibre Reinforced Concrete	06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Opaque section	Insulated shadow box	-	m ²		06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Opaque section	Brick cladding	-	m ²		06_EW	03 or 04
Stick-framed wall system	Aluminium frame	Opaque section	Stone cladding	-	m ²		06_EW	03 or 04
Stick-framed wall system	Steel frame	Glazed section	Single glazed	-	m ²	Include all single glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Stick-framed wall system	Steel frame	Glazed section	Double glazed	-	m ²	Include all double glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Stick-framed wall system	Steel frame	Glazed section	Triple glazed	-	m ²	Include all triple glazing, including standard, toughened, laminated and low-E	06_EW	03 or 04
Stick-framed wall system	Steel frame	Opaque section	Aluminium cladding	-	m ²		06_EW	03 or 04
Stick-framed wall system	Steel frame	Opaque section	GRC cladding	-	m ²	GRC = Glass-fibre Reinforced Concrete	06_EW	03 or 04
Stick-framed wall system	Steel frame	Opaque section	Insulated shadow box	-	m ²		06_EW	03 or 04
Stick-framed wall system	Steel frame	Opaque section	Brick cladding	-	m ²		06_EW	03 or 04

Stick-framed wall system	Steel frame	Opaque section	Stone cladding		06_EW	03 or 04
Stick-framed wall system	Other (Please describe >>)			m ²	Please enter a description for any wall system that does not fit a predefined classification	06_EW
Wall louvre system	Aluminium			m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Aluminium cladding		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	GRC cladding		m ²	GRC = Glass-fibre Reinforced Concrete. Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Terracotta cladding		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Stone cladding		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Pre-cast concrete		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Timber		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Glass (opaque)		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Aluminium frame	Steel		m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
External shading system	Other (Please describe >>)			m ²	Please enter as m ² of shaded area = linear metres * (width in mm / 1000)	06_EW
Roller doors	Steel profile			m ²	Please note unit is square metres, not quantity	06_ED
Roller doors	Hardwood over steel			m ²	Please include both wall and ceiling insulation	05_RF or 06_EW
Roller doors	Softwood over steel			m ²	Please note unit is square metres, not quantity	06_ED
Revolving doors	Glass/aluminium/steel			no.		06_ED
Fire-rated doors	Engineered timber			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	06_ED
Fire-rated doors	Steel			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	06_ED
Fire-rated doors	Aluminium/glass			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	06_ED
Insulation	Glass wool / Fibreglass			m ²	Please include both wall and ceiling insulation	05_RF or 06_EW
Insulation	Stone wool			m ²	Please include both wall and ceiling insulation	05_RF or 06_EW
Insulation	Polyester			m ²	Please include both wall and ceiling insulation	05_RF or 06_EW
Insulation	Expanded polystyrene			m ²	Please include both wall and ceiling insulation	05_RF or 06_EW
Insulation	Other (Please describe >>)			m ²	Please include both wall and ceiling insulation	05_RF or 06_EW
Other (Please describe and add unit >>)				m ²	Please enter a description for any envelope material that does not fit a predefined classification	
Other (Please describe and add unit >>)				m ²	Please enter a description for any envelope material that does not fit a predefined classification	
Other (Please describe and add unit >>)				m ²	Please enter a description for any envelope material that does not fit a predefined classification	

Permanent internal walls and doors

Walls and doors within the building that are either structural or designed to be permanent.

Coverage of material spend on permanent internal walls and doors			80	%	Enter the % coverage of spend for the items you have entered below. There is no minimum requirement, enter what you know. This should include all structural walls. Exclude head contractor estimates and margins.		
Interior wall (permanent)			15,573,330.00	\$		09_NW	03 or 04
Interior wall (permanent)	Timber framing			m ³		09_NW	03 or 04
Interior wall (permanent)	ACI panel (reinforced)			m ²	Panels of autoclaved aerated concrete (AAC) with reinforcing steel. E.g. Hebel.	09_NW or 12_WF	03 or 04
Interior wall (permanent)	Concrete-filled steel panel			m ²	Speedpanel.	09_NW or 12_WF	03 or 04
Interior wall (permanent)	Plasterboard			m ²	Enter as single-layer equivalent. If using 2 layers, multiply the area by 2.	09_NW or 12_WF	03 or 04
Interior wall (permanent)	Plywood			m ²	Enter as single-layer equivalent. If using 2 layers, multiply the area by 2.	09_NW or 12_WF	03 or 04
Interior wall (permanent)	Fibre cement sheet			m ²	Enter as single-layer equivalent. If using 2 layers, multiply the area by 2.	09_NW or 12_WF	03 or 04
Interior wall (permanent)	Insulation			m ²		09_NW or 12_WF	03 or 04
Interior wall (permanent)	Glass			m ²		09_NW or 12_WF	03 or 04
Interior wall (permanent)	Other (Please describe >>)			m ²	Please enter a description for any internal wall that does not fit a predefined classification	09_NW or 12_WF	03 or 04
Internal door (permanent)	Aluminium/glass			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	11_ND	03 or 04
Internal door (permanent)	Timber/glass			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	11_ND	03 or 04
Internal door (permanent)			4,385,604	\$	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	11_ND	03 or 04
Internal door (permanent)	Fire resistant			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	11_ND	03 or 04
Internal door (permanent)	Steel			no.	Please enter as single-leaf equivalent. For double-leaf doors, multiply the quantity by 2.	11_ND	03 or 04
Internal door (permanent)	Other (Please describe >>)			m ²	Please enter a description for any internal door that does not fit a predefined classification	11_ND	03 or 04
Other (Please describe and add unit >>)				m ²	Please enter a description for any material that does not fit a predefined classification		
Other (Please describe and add unit >>)				m ²	Please enter a description for any material that does not fit a predefined classification		
Other (Please describe and add unit >>)				m ²	Please enter a description for any material that does not fit a predefined classification		
Internal screens			807,506	\$			

Services

Building services included within the main building contract. If the building components that are the subject of the development application or the construction certificate are base building only, then only enter these items. If you cannot split services by type, please enter them all in the "Other services" category at the bottom. Enter all values as material costs in dollars.

Services				Unit of measure			
Mechanical services			5,767,900	AUD excl. GST	Where possible, enter material costs excluding labour, plant, equipment, margins and taxes	28_SS	05
Vertical transportation			5,775,000	AUD excl. GST	Where possible, enter material costs excluding labour, plant, equipment, margins and taxes	28_SS	05
Electrical services			14,419,750	AUD excl. GST	Electrical services including the main power supply, backup generators, security and communications. Excluding solar installers.	26_LP	05
Solar photovoltaic installations				AUD excl. GST	Where possible, enter material costs excluding labour, plant, equipment, margins and taxes	26_LP_LPGP	05
Plumbing/hydraulic services			50,180,730	AUD excl. GST	Where possible, enter material costs excluding labour, plant, equipment, margins and taxes	18_PO and 19_WS	05 or 06
Fire services			7,496,270	AUD excl. GST	Where possible, enter material costs excluding labour, plant, equipment, margins and taxes	25_FFSS04 or 39_XNWX_03 or 41_XF	05
Other services (Please describe)				AUD excl. GST	Please group all other services here, meaning that coverage will always be 100% for services. Enter only the material costs (excluding labour, plant, equipment, margins and taxes).	29_SS or multiple	

External works

The materials associated with hard landscaping and outbuildings on the site but outside the building envelope. This includes hardstands, carparks, driveways, covered walkways, docks, patios, awnings, fences, gates, etc. Soft landscaping should be excluded.

Coverage of spend on external works			80	%	Required. Coverage of spend for external works (excluding soft landscaping) entered below. Minimum requirement = 80%. Exclude head contractor preliminaries and margins.		
Asphalt				t		33_XR	07
Concrete in-situ	<10 MPa			m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	33_XR or 34_XN or 35_XB or 36_XL	07
Concrete in-situ	>10 MPa to <20 MPa			m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	33_XR or 34_XN or 35_XB or 36_XL	07
Concrete in-situ	>20 MPa to <32 MPa			m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	33_XR or 34_XN or 35_XB or 36_XL	07
Concrete in-situ	>32 MPa to <40 MPa			m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	33_XR or 34_XN or 35_XB or 36_XL	07
Concrete in-situ	>40 MPa to <50 MPa			m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	33_XR or 34_XN or 35_XB or 36_XL	07
Concrete in-situ	>50 MPa			m ³	Please enter reinforcing steel as part of "Reinforcing steel" below	33_XR or 34_XN or 35_XB or 36_XL	07
Pavers, bricks and blocks	Concrete			m ²		33_XR	07
Pavers, bricks and blocks	Clay			m ²		33_XR	07
Reinforcing steel	Bar & mesh			kg	Include all reinforcing steel bar/mesh in the external works in this row. Usually this is calculated as kg/m ³ per concrete element and then summed. Example: 10 m ³ of 40 MPa concrete @ 100 kg/m ³ + 5 m ³ of 50 MPa concrete @ 150 kg/m ³ = 1,750 kg reinforcing steel.	33_XR or 34_XN or 35_XB or 36_XL	07
Reinforcing steel	Fibre & strand			kg	Include all steel fibre reinforcing and steel strand in the external works in this row.	33_XR or 34_XN or 35_XB or 36_XL	07
Structural steel				t		02_11	07
Structural aluminium				t	Includes structures, louvre systems, etc.	35_XB	07
External roof/wall cladding	Polycarbonate			m ²	Enter as profiled polycarbonate sheet that would ordered, including allowance for overlap	35_XB	07
External roof/wall cladding	PVC			m ²	Enter as profiled PVC sheet that would ordered, including allowance for overlap	35_XB	07
External roof/wall cladding	Bitumen sheet			m ²	Enter as bituminous sheet that would ordered, including allowance for overlap	35_XB	07
External roof/wall cladding	Steel profile			m ²	Enter as profiled steel sheet that would ordered, including allowance for overlap	35_XB	07
Fill				t	Include purchased material only. Exclude site-won material.	33_XR or 34_XN or 35_XB or 36_XL	07
Sand & gravel				t	Include purchased material only. Exclude site-won material and sand/gravel in concrete.	33_XR or 34_XN or 35_XB or 36_XL	07
Timber (solid)	Sawn softwood			m ³		33_XR or 34_XN or 35_XB or 36_XL	07
Timber (solid)	Sawn hardwood			m ³		33_XR or 34_XN or 35_XB or 36_XL	07
Timber (engineered)	CLT			m ³		33_XR or 34_XN or 35_XB or 36_XL	07
Timber (engineered)	Glulam			m ³		33_XR or 34_XN or 35_XB or 36_XL	07
Timber (engineered)	LVL			m ³		33_XR or 34_XN or 35_XB or 36_XL	07
Timber (engineered)	OSB			m ³		33_XR or 34_XN or 35_XB or 36_XL	07
Fabric (awning/sunshade)				m ²		35_XB or 36_XL	07
Other (Please describe and add unit >>)				m ²	Please enter a description for any external works that does not fit a predefined classification		
Other (Please describe and add unit >>)				m ²	Please enter a description for any external works that does not fit a predefined classification		
Other (Please describe and add unit >>)				m ²	Please enter a description for any external works that does not fit a predefined classification		
Landscaping			2,272,750	\$			
Other Works			1,425,450	\$			

Step 3: Certifier details

Fill out blue cells

The material quantities must be determined through an itemised list of building materials (such as a bill of quantities) and certified by a quantity surveyor, designer, engineer or NABERS Assessor.

Person that completed this form	Value	Note
Name	Padraig Healy	Required
Company	Credwell Energy Pty Ltd	Required
ABN	65 625 598 352	
Profession	Director - ESD/ Sustainability Engineer	Required
Qualification or registration	NABERS Assessor	Required

Person that certified the details in this form	Value	Note
Name	Padraig Healy	Required
Company	Credwell Energy Pty Ltd	Required
ABN	65 625 598 352	
Profession	Director - ESD/ Sustainability Engineer	Required
Qualification or registration	NABERS Assessor: 90398	Required

Confirmation of certification	Value	Note
Are 80% of material costs captured for the building's structure, envelope and external works?	Yes	Required
If no - why not?		

Additional comments from data provider

Additional comments of certifier

Attach this Excel spreadsheet to your development application or construction certificate application.

This version:

1.20

Version history:

1.00	01-October-2023	Initial version.
1.10	12-October-2023	Error on 'Instructions' tab - changed 'cost of materials' for (1)-(4) to 'quantity of materials'.
1.20	24-October-2023	Manual check for updates using button (instead of each time the sheet is opened).