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25 ST. MARY CARBON ANALYSIS REPORT

FOR

TENBLOCK

25 ST. MARY ST.

TORONTO, ON

OUR PROJECT NUMBER:

21404.001.F.001

DATE:

Monday, November 21, 2022

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GLOSSARY OF TERMS

Carbon Emissions: The release of carbon into the atmosphere.

Existing Building: The building currently standing at 25 St. Mary.

Proposed Development: The new building that is proposed to be constructed at 25 St. Mary.

Annual Consumption: The amount of energy consumed by a building in a calendar year.

Consumption Intensity: The amount of annual consumption normalized to a universal factor. For this report, the factor is the quantity of suites.

Carbon Intensity: The amount of annual carbon emissions normalized to a universal factor. For this report, the factor is quantity of suites.

Cumulative Emissions: The addition of annual carbon emissions for a given number of years.

Carbon Positive: The point of time where the Cumulative Emissions of the Proposed Development are lower than the Cumulative Emissions of the Existing Building.

Embodied Carbon: The carbon emissions associated with creating the building products, construction of a building, and disposal of building materials after demolition.

Life Cycle Assessment: A method to assess the overall environmental impact associated with all stages of the life cycle of a building.

kWh: Denotes kilowatt hours (ekWh denotes equivalent kWh hours. Used only when comparing natural gas use and electricity use directly).

$kgCO_{2e}$: Denotes kilograms of equivalent carbon dioxide emissions. Used to combine all different greenhouse gas emissions into one term.

m^3: Denotes cubic meters. Used to quantify natural gas consumption.

EXECUTIVE SUMMARY

Authorization

This report was prepared at the request of Tenblock. A similar report was issued for the previous design iteration of the proposed development at 25 St. Mary – dated August 6, 2021. This report reflects changes to the proposed development's design. This includes the addition of 140 residential units – from 1,143 to 1,283 total units – and the elimination of three underground parking levels. The following key differences were found between the previous version of this report:

- Embodied carbon emissions per unit have decreased from 31,122 $kgCO_{2e}$/unit to 26,977 $kgCO_{2e}$/unit
- Annual emissions for the proposed development have decreased from (depending on the Toronto Green Standard Tier) 1,433 $kgCO_{2e}$/unit (Tier 1) and 358 $kgCO_{2e}$/unit (Tier 4) to 1,259 $kgCO_{2e}$/unit and 315 $kgCO_{2e}$/unit
- The carbon positive timeline for the proposed development has improved from 13 years for Tier 1 and 9 years for Tier 4 to 9 years and 7 years, for Tiers 1 and 4 respectively.

Purpose

This report presents the findings of a carbon analysis performed at 25 St. Mary St. in Toronto, Ontario. The analysis compares the existing building's carbon emissions with the proposed development to determine the amount of time it will take for the proposed development to become carbon positive. The analysis also compares the carbon emissions of the proposed development to a similar number of homes in a suburban development. The embodied carbon of the proposed development and the estimated annual emissions were taken into consideration in this analysis.

Existing Asset Overview

25 St. Mary is a multi-unit residential building (MURB) located on St. Mary St between Yonge St and Bay St. The building has 24 above-grade storeys and 2 underground parking levels. The building currently has 259 rental suites and was constructed in 1965.

A water-cooled chiller located in the boiler room provides building cooling via a chilled water system. Building heating is provided by two gas-fired boilers that are original to the building and distributed to the suites via a hot water loop. Domestic hot water is provided by three hot water boilers and three storage tanks. A Building Automation System (BAS) controls the building heating and domestic hot water systems. In the suites, air is constantly exhausted from the kitchens and washrooms. The suites have heating and air conditioning control through thermostats. The facility follows a general multi-residential building schedule. The building equipment is well maintained by knowledgeable and conscientious building operators.

Key Findings

The report identifies and compares the carbon emissions of the existing building and the proposed building at various tiers of the Toronto Green Standard (v3). The buildings were compared on a per-suite basis. The following key results were found:

- The existing building emits 3,771 $kgCO_{2e}$/unit annually and an additional 570 $kgCO_{2e}$/unit of transportation emissions.
- The embodied carbon emissions of the proposed development totaled 34,613 Ton CO_{2e} or 26,977 $kgCO_{2e}$/unit.
- The annual emissions of the proposed building range based on which Toronto Green Standard Version 3 Tier is considered from 1,259 $kgCO_{2e}$/unit (Tier 1) to 315 $kgCO_{2e}$/unit (Tier 4) annually and an additional 125 $kgCO_{2e}$/unit of transportation emissions.
- Carbon positive timelines for Tiers 1-4 compared to the current building – including transportation emissions are: 9 years, 8 years, 7.5 years, and 7 years.

1. BENCHMARKING

Utility Consumption

Tenblock provided monthly utility data as tabular data. For benchmarking purposes, the utility bills from January 2016-December 2020 were used. The annual consumption of electricity and natural gas was averaged to determine a typical year's energy consumption. Table 1 below summarizes the utility consumption and greenhouse gas (GHG) emissions for the property.

Table 1: Utility Data for 25 St. Mary (January 2016 – December 2020)

Utility	Annual Consumption	Consumption Intensity	Carbon Emissions	Carbon Intensity
Electricity Consumption	911,700 kWh	3,520 kWh/suite	27,352 $kgCO_{2e}$	106 $kgCO_{2e}$/unit
Natural Gas	500,000 m^3	1,930 m^3/suite	945,400 $kgCO_{2e}$	3,665 $kgCO_{2e}$/unit

Over the course of the year, the monthly carbon emissions vary. This is dependent on the natural gas consumption as it is the main driver of carbon emissions in the building. The figure below shows the annual emissions pattern for each analysed year.

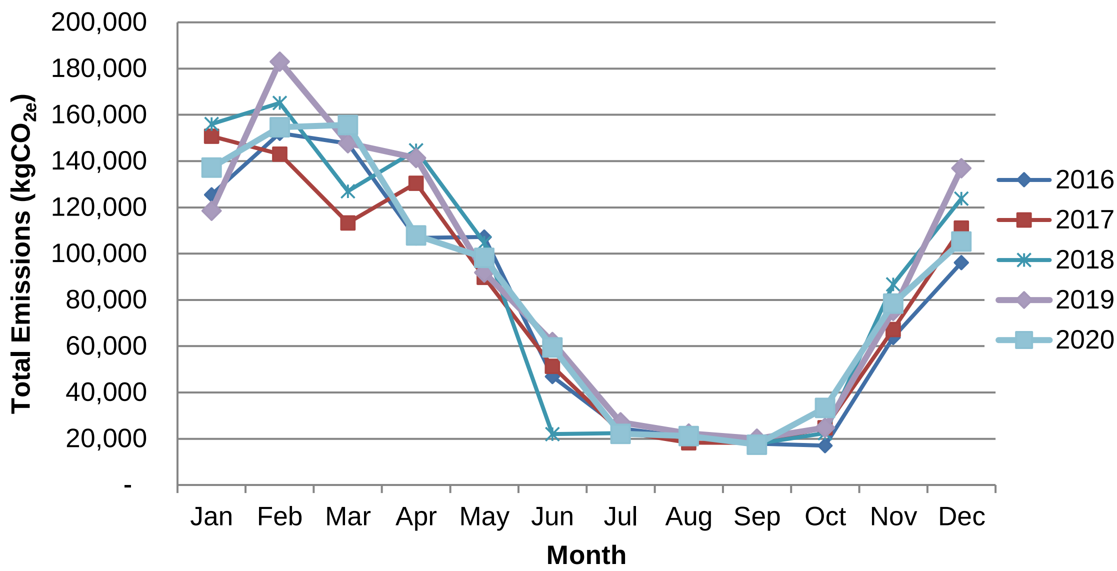

Figure 1: Total Monthly Emissions 25 St. Mary

Energy Use Intensity

To directly compare the GHG emissions of the existing building with the proposed development, the total emissions of the existing building needed to be normalized based on the number of existing suites. 25 St. Mary currently has 259 rental suites – resulting in average annual emissions of 3,771 $kgCO_{2e}$/unit.

2. PROPOSED BUILDING ANALYSIS

The proposed development will consist of two towers connected by a podium level. The total number of available suites will increase from 259 in the existing building to 1,283. The West Building will have 634 units and 59 levels. The East Building will have 649 units and 54 levels. The proposed development will include one level of underground visitor parking and bicycle parking. The emissions of the proposed development will be compared to the emissions of the existing building and to a typical suburban development with a similar number of units.

Life Cycle Assessment Methodology

Life Cycle Assessment ("LCA") is the method of measuring a project's environmental impact through the whole life cycle of the building including the manufacturing, construction, and final use of the resources required for the delivery of the building function.

The analysis of the proposed building and the typical suburb development life cycle impact and was completed using One Click LCA. The program is in accordance with ISO 14044 and US EPA's Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI).

The project model assumes a building lifetime of 60 years and includes the following assemblies and elements:

- building envelope
- footings
- foundations
- structural wall assemblies
- structural floors and ceilings
- roof assemblies
- parking structures
- stair construction
- interior partitions (an optional addition)

The process of LCA follows multiple stages of production, construction, use, and life as shown in Figure 2: Life Cycle Stages.

For the selected building materials, a mixture of product specific and industry wide environmental product declarations (EPDs) were used where best applicable – refer to Appendix C – Proposed Building LCA Model Inputs Materials. The EPD data is updated as the documents expire and global warming potential (GWP) values may increase or decrease upon re-issue. These updates have been applied to this version of the report following the updated architectural plans for the proposed development.

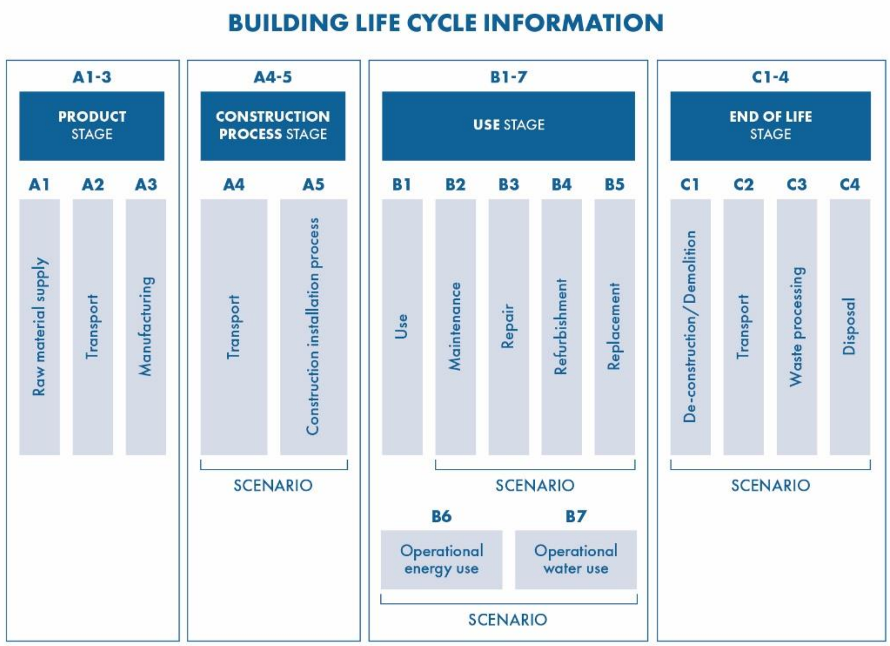

Figure 2: Life Cycle Stages

Proposed Building Embodied Carbon

By quantifying the impact of building construction, maintenance and eventual demolition, a project can evaluate the full lifecycle carbon emissions developing a better understanding of the building's environmental impact, and ideally, supporting decisions that progress toward a more sustainable building. LCA scopes can vary depending on the project needs and goals, but must always include the complete enclosure and structure. Because the proposed development is two separate towers, the LCA was split between the West and East Tower. Table 2 summarizes the emissions associated with the West Tower. Table 3 summarizes the emissions associated with the East Tower. Table 4 includes the emissions for both towers, the podium levels and parking level, and the emissions associated with demolition of the existing building. The Section numbers indicated in the tables refers to the process described in Figure 2.

Table 2: Embodied Carbon Emissions Breakdown of Proposed Building Once Constructed – West Tower

Section	Result Category	Emissions (Ton CO_{2e})
A1-A3	Construction Materials	12,203.4
A4	Transportation to Site	1,170.5
A5	Construction & Installation	527.5
B4-B5	Material Replacement & Refurbishment	84.9
C1-C4	End of Life (Demolition of Proposed Building)	660.0
Total		**14,646.3**

Table 3: Embodied Carbon Emissions Breakdown of Proposed Building Once Constructed – East Tower

Section	Result Category	Emissions (Ton CO_{2e})
A1-A3	Construction Materials	11,069.3
A4	Transportation to Site	1,101.5
A5	Construction & Installation	489.1
B4-B5	Material Replacement & Refurbishment	73.8
C1-C4	End of Life (Demolition of Proposed Building)	615.6
Total		**13,349.3**

Table 4: Embodied Carbon Emissions Breakdown – Total including Podium and Parking Level

Section	Result Category	Emissions (Ton CO_{2e})
C1-C4	End of Life – Existing Building	1,400.0
A1-A3	Construction Materials	27,680.0
A4	Transportation to Site	2,649.8
A5	Construction & Installation	1,206.0
B4-B5	Material Replacement & Refurbishment	168.8
C1-C4	End of Life (Demolition of Proposed Building)	1,508.0
Total		**34,612.6**

Table 4 above shows the emissions from various stages of the life cycle of the proposed development. The breakdown includes the emissions from demolishing the existing building, constructing the proposed buildings, and the demolition of the proposed buildings. The total emissions found by the LCA was 34,612.6 Ton CO_{2e}. This value was used to perform the carbon emissions analysis comparing the proposed buildings' emissions to the existing building. Dividing the total emissions by the total number of proposed units, the embodied carbon of the proposed construction totals 26,977 kgCO_{2e}/unit. To determine the carbon positive timeline, this value was added to the first year of carbon emissions for the proposed development.

Proposed Building Carbon Emissions

The proposed development's annual carbon emissions were calculated in four separate scenarios – representing Tiers 1-4 of the Toronto Green Standard Version 3. The carbon emission intensity of the proposed buildings was calculated based on the acceptable emissions for each tier and the number of units in the proposed building design. The results of the calculations are summarized in the table below. These represent the estimated annual emissions of the proposed development after the buildings are constructed and operational.

Table 5: Proposed Development Annual Carbon Emissions Breakdown

	TGS v3 Tier 1	TGS v3 Tier 2	TGS v3 Tier 3	TGS v3 Tier 4
Carbon Intensity ($kgCO_{2e}/m^2$)	20	15	10	5
Total Emissions (ton CO_{2e})	1,615	1,212	808	404
Emissions per suite ($kgCO_{2e}$/unit)	1,259	944	629	315

Typical Suburban Development

Another consideration is the alternative to constructing a new urban multi-unit residential building. In the second half of the 20th century, new housing developments have commonly been single-family homes in suburban regions outside of the city centre. The emissions of the proposed development can be better understood when compared to this alternative form of housing development.

In the next ten years, the five Census Divisions that comprise the Greater Toronto Area will see their combined populations grow by over 1.2 million, according to projections from the Ontario Ministry of Finance. Outside of the City of Toronto, Peel Region is anticipated to grow the fastest[1]. For this analysis, the proposed new units were replaced with single-family homes located in the Centre of Peel Region, 43 km from Toronto's city centre.

As there are 1,024 new units in the proposed development, it was assumed that 1,024 houses would be constructed. The existing 259 units are assumed to remain – therefore those units are not included in this analysis. It was found that the total emissions to construct 1,024 single detached houses is about 38,530Ton CO_{2e}. This was calculated using the same method outlined in the Life Cycle Assessment Methodology Section. The breakdown of emissions for constructing the suburban development is summarized in the table below. Each house was assumed to be 1,700 ft^2 and have three bedrooms.

Table 6: Embodied Carbon Emissions of an Equivalent Suburban Development

Section	Result Category	Emissions (Ton CO_{2e})
A1-A3	Construction Materials	24,309.4
A4	Transportation to Site	3,000.8
A5	Construction & Installation	1,703.3
B4-B5	Material Replacement & Refurbishment	6,128.3
C1-C4	End of Life	3,388.3
Total		**38,530.0**

[1] https://institute.smartprosperity.ca/sites/default/files/Baby-Needs-a-New-Home-Oct-1.pdf

Another important consideration is the GHG emissions of a typical suburban development compared to the proposed building. Two major factors contribute to annual carbon emissions: the house, and transportation. To determine the emissions from the house, emissions factors from a report by Natural Resources Canada titled *Achieving Real Net Zero Emission Homes: Embodied carbon scenario analysis of the upper tiers of performance in the 2020 Canadian National Building Code*. The report cites the average emissions of a two-storey home in Toronto to be 3,500 $kgCO_{2e}$ annually. This value was used for the house's annual emissions.

The GHG emissions associated with transportation were also considered. People living in transit-oriented housing have different commuting patterns than those living in suburban communities. These differences are reflected in their transportation-related emissions. Therefore, this should be considered to develop a more complete picture of the carbon emissions. To complete the analysis, the number of trips needed to be established.

The number of generated trips by mode for the proposed development were estimated by WSP using ITE Trip Generation Manual. These person trips were distributed between each mode of travel based on the modeshares reported in the 2016 Transportation Tomorrow Survey for home-based trips in subject zone 46. As no resident parking is proposed for the development, the auto driver mode share was redistributed to the other modes of travel. Table 7 below shows the number of daily trips – not just peak AM/PM trips – by mode for the proposed development. Mode "Other" indicates motorcycles and school buses. These trip numbers were used to determine the average transportation emissions per unit for the proposed development.

Table 7: Number of Trips by Mode (Proposed Development)

Mode	Weekday	Saturday	Sunday
Automobile	0	0	0
Auto Passenger*	663	731	653
Transit	5,452	5,997	5,370
Cycling	501	551	494
Walking	3,738	4,113	3,683
Other	38	40	38
Total	**10,392**	**11,432**	**10,238**

* Includes passengers being picked up and dropped off in private vehicles, taxis, and rideshares

To determine the current building's trips by mode, the *Residential Development Transportation Study*, dated June 7th, 2021, prepared by WSP was used. It is therefore an appropriate indicator of the mode-share of the existing building. The number of trips for each mode were adjusted to reflect the size of the existing building. Table 8 below shows the estimated trips by mode of the current building. These trip numbers were used to determine the average transportation emissions per suite for the current building.

Table 8: Number of Trips by Mode (Current Building)

Mode	Weekday	Saturday	Sunday
Automobile	380	418	375
Auto Passenger	64	70	63
Transit	900	990	886
Cycling	83	91	82
Walking	617	679	608
Other	54	59	53
Total	**2,096**	**2,306**	**2,065**

To determine the number of trips in each mode for the suburban development, average mode-share values for suburban developments near the City of Toronto were used. The results are summarized in Table 9. The weekday commute was assumed to be 43 kilometers from the city centre – the distance from Brampton's city hall to Toronto's. The total number of trips was based on the total trips from Table 7 and distributed based on a weighted average of mode-share from the suburbs listed in Table 9. The number of trips for each mode in the suburban development is shown in Table 10. These trip numbers were used to calculate the average transportation emissions per house for the suburban development.

Table 9: Commuter Statistics for Suburbs of Toronto

Municipality of Residential Zone	**Daily Trips per Household**					
	Total	**Auto**	**Transit**	**Walk**	**Cycle**	**Other**
Pickering	5.7	4.7	0.5	0.1	0.0	0.4
Ajax	5.2	4.3	0.6	0.2	0.0	0.1
King City	5.0	4.5	0.3	0.3	0.0	0.0
Whitchurch-Stouffville	4.5	3.8	0.2	0.5	0.0	0.0
Bolton	5.5	5.0	0.1	0.1	0.0	0.3
Brampton	7.4	6.1	0.7	0.2	0.0	0.4
Milton	5.8	4.8	0.4	0.5	0.1	0.0
Average Modeshare		**85.1%**	**7.0%**	**5.1%**	**0.2%**	**2.5%**

Table 10: Number of Commuters by Mode - Suburban Development

Mode	Weekday	Saturday	Sunday
Automobile	6,806	7,487	6,706
Auto Passenger	252	278	248
Transit	580	638	571
Cycling	20	22	20
Walking	425	467	419
Other	211	232	208
Total	**8,294**	**9,124**	**8,171**

To determine how the number of trips translates into carbon emissions, emissions factors needed to be determined. Although SUVs and pick-up trucks represent 80% of new vehicle sales in Canada[2], the carbon emissions from driving were based on the more conservative emissions factor of the most popular compact car, the Honda Civic which produces 0.165kgCO_{2e} per kilometer driven. Motorcycle emissions were estimated to be 0.113kgCO_{2e} per kilometer ridden. The suburban transit riders were assumed to be using the GO train network, which currently uses diesel-powered trains. The emissions factor for these trains is 0.091kgCO_{2e} per passenger per kilometer. The electrified subway system and streetcars result in a per passenger emissions factor of just 0.005kgCO_{2e} per kilometer. Because of its central location within downtown, it was assumed that the residents of the proposed development are within 5 kilometers of work. The emissions factors for transportation are summarized in Table 11 and Table 12. The emissions in the Suburban Development scenario includes the transportation emissions for the assumed 1,024 new single detached homes.

Table 11: Emissions Factors for Each Transportation Mode

Transport Mode	kgCO_{2e}/passenger per kilometer	kgCO_{2e}/passenger per day	kgCO_{2e}/passenger per year
Single Car	0.165	14.19	5,164
Motorcycle	0.113	9.75	3,549
Subway	0.005	0.05	18.1
GO Train	0.091	7.8	2,037

Table 12: Per-unit Emissions for Transportation

	Existing Building	Proposed Building	Suburban Development
Auto (including passenger) (kgCO_{2e}/unit)	483.7	78.5	7,783.1
Motorcycle (kgCO_{2e}/unit)	54.8	7.8	54.6
Subway (kgCO_{2e}/unit)	31.8	38.9	
GO Train (kgCO_{2e}/unit)			342.5
Total Emissions (kgCO_{2e}/unit)	570.3	125.2	8,180.3

The emissions from the home and from transportation can be combined to get the total emissions for the proposed development and the suburban development. Total annual emissions – including transportation emissions – for a suburban home are 11,680 kgCO_{2e}/unit. The comparison of the emission differences is summarized in Table 13.

[2] https://driving.ca/column/driving-by-numbers/driving-by-numbers-canadas-10-best-selling-vehicles-in-2021

Table 13: Proposed Development's Emissions Compared to a Suburban Home

		Proposed Building			
	Suburban Development	**TGS v3 Tier 1**	**TGS v3 Tier 2**	**TGS v3 Tier 3**	**TGS v3 Tier 4**
GHG Intensity ($kgCO_{2e}$/unit)	3,500	1,259	944	629	315
Transportation GHG ($kgCO_{2e}$/unit)	8,180	125.2	125.2	125.2	125.2
Total Annual GHG ($kgCO_{2e}$/unit)	**11,680**	**1,384**	**1,069**	**755**	**440**
Percent Savings		86.4%	89.5%	92.6%	95.7%
Embodied Carbon ($kgCO_{2e}$/unit)	37,627	26,977	26,977	26,977	26,977

3. CARBON EMISSIONS ANALYSIS

The purpose of this analysis is to understand how the current building's GHG emissions compared to the proposed development's emissions. Table 14 below shows how the existing building compares to the emissions of the proposed buildings. The proposed development is represented in four scenarios – each representing a different tier of Toronto Green Standard v3.

Table 14: Existing Building Emissions compared to Proposed Building

		Proposed Building			
	Existing Building	**TGS v3 Tier 1**	**TGS v3 Tier 2**	**TGS v3 Tier 3**	**TGS v3 Tier 4**
GHG Intensity ($kgCO_{2e}$/unit)	3,771	1,259	944	629	315
Transportation GHG ($kgCO_{2e}$/unit)	570.3	125	125	125	125
Total Annual GHG ($kgCO_{2e}$/unit)	**4,341**	**1,384**	**1,069**	**755**	**440**
Percent Savings		**68%**	**75%**	**83%**	**90%**
Embodied Carbon ($kgCO_{2e}$/unit)	N/A	26,977	26,977	26,977	26,977

Quantifying the embodied carbon emissions of the existing building was also investigated. Since the existing building was constructed in 1965 (57 years ago), carbon emissions associated with the materials and construction of the existing building have already been emitted and are not impacted by the construction of the proposed development. However, the emissions associated with the demolition of the existing building are included in the embodied carbon calculations for the proposed development. The purpose of this analysis is to determine the time it will take for the proposed buildings to become carbon positive. The emissions associated with the construction of the existing building do not impact that timeline and are excluded from this analysis.

Figure 3 below shows the accumulated carbon emissions over time. Included in Figure 3 are the GHG Intensity and transportation emissions for the existing building and the proposed development, and the embodied carbon of the proposed development – all per unit. While the embodied carbon of the proposed building is significant, the improved energy performance and transportation emissions of the proposed building mean that the proposed development will be carbon positive between 7 and 9 years after construction.

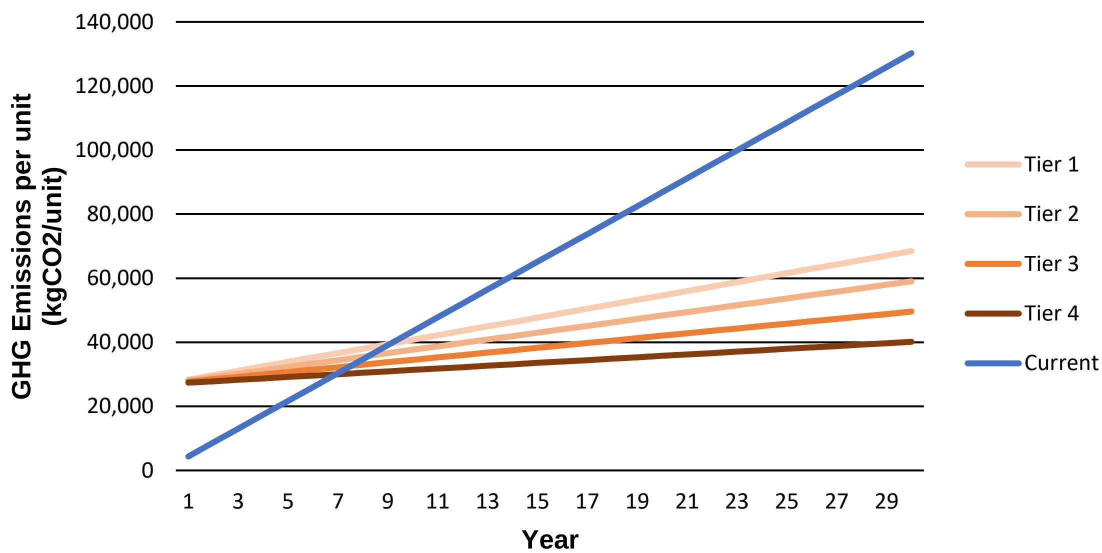

Figure 3: Cumulative Carbon Emissions per Unit

Assumptions and Limitations

The LCA was done based on available drawings provided on 2022-10-22. Due to the stage of the development, default values or assumptions based on project experience were used in areas where information was limited or not available. These assumptions are noted in Appendix B of this report.

Site work, including but not limited to excavation, landscaping, and other site development, are not part of the scope of the LCA for the proposed building and suburban dwelling scenarios. The investigation into the embodied carbon on interior finishes can be investigated as the project design develops.

The selection for each building material was selected to be industry wide environmental product declarations or data sets as available by One Click LCA whenever possible, including typical selections such as recycled content. Any product specific environmental product data used is noted within Appendix B.

For the initial LCA exercise, industry average data was used based on available documentation within One Click LCA, as such the associated emissions values may be expected to be conservative in most cases. The design development for the project efforts will be made to provide the most accurate data available.

In order to project the future performance of the existing building, a number of assumptions were made. The most significant of which is the assumption that the current operation of the existing building does not change in the near future. The per-suite carbon emissions were calculated based on the previous 5 years of utility data. In order to estimate the future emissions, it was assumed that the operations would not significantly change from the current performance.

The hot water boilers at 25 St. Mary appear to be original to the building. While they appear to be in working order, they are not high-efficiency condensing boilers. This analysis assumes there are no retrofits of the heating system that would increase the overall efficiency. It also assumes that the current equipment does not lose efficiency through wear and deterioration.

LIMITS OF LIABILITY ASSOCIATED WITH THIS REPORT

1. It is understood that hazardous materials may be present (e.g. asbestos, mould, PCB’s, etc.) within the existing building. The identification of and abatement recommendations with respect to hazardous materials is outside the scope of services provided. Any costs associated with hazardous materials were not evaluated as part of this report.

2. The review of existing installations was general in nature and limited to casual, visual observation without removal of ceilings, chases, destructive testing or dismantling. The review was not exhaustive and was performed to acquire a general understanding of the condition of existing systems. Very limited existing drawings were made available for the review of existing systems.

3. This report has been prepared solely for the use of the Client. The material contained in this report reflects our best judgement in light of the information available at the time of preparation. There is no warranty expressed or implied. Professional judgement was exercised in gathering and assessing information. The results presented are the product of professional care and competence and cannot be construed as an absolute guarantee.

4. Where expected or anticipated equipment life is provided it is based on ASHRAE Median Service Life statistics. Actual life of equipment will vary depending on variables such as operation, service and maintenance frequency.

5. Capital cost estimates are made are equivalent to Class D order of magnitude estimates. Actual costs will vary depending on final design solution and contractor pricing.

APPENDIX A – UTILITY ANALYSIS

Electricity Analysis

There are two electricity meters at 25 St. Mary. The main meter measures the general electricity consumption in the building – including resident consumption. The second meter is only used to measure the consumption from the building's air conditioning.

The main meter measures electricity consumed in the building. The monthly electricity consumption remains fairly consistent throughout the year with an increase in the summer months. Since the building's air conditioning system is separately metered, the increase in the summer may be explained by increased use of pumping and fan power, and area fans within the suites. Figure 4 below shows the electricity consumption of the main meter.

The building's second meter only monitors the electricity consumption of the air conditioning system. As it can be expected, the monthly electricity consumption peaks during the summer months.

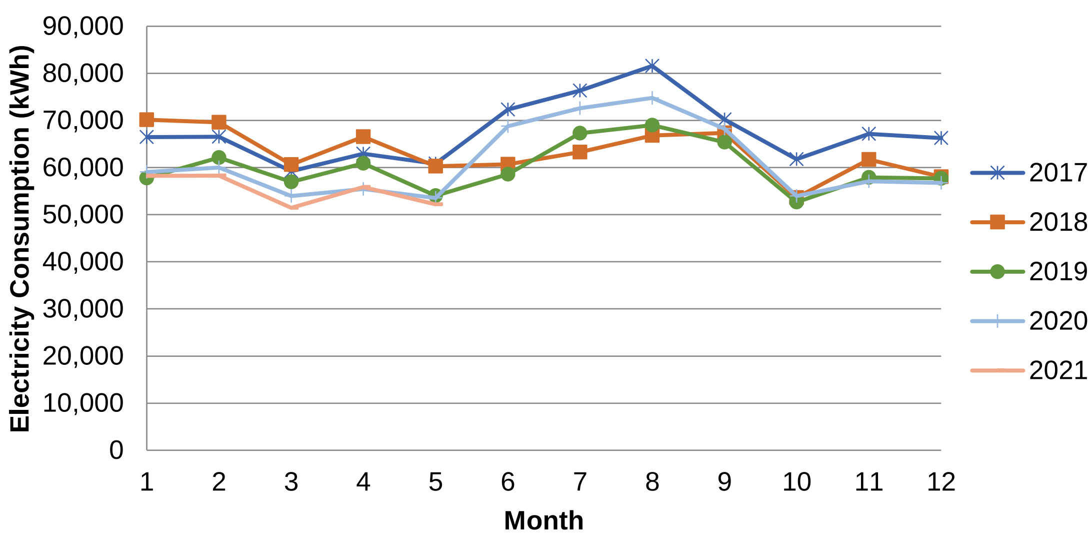

Figure 4: Main Meter Electricity Consumption

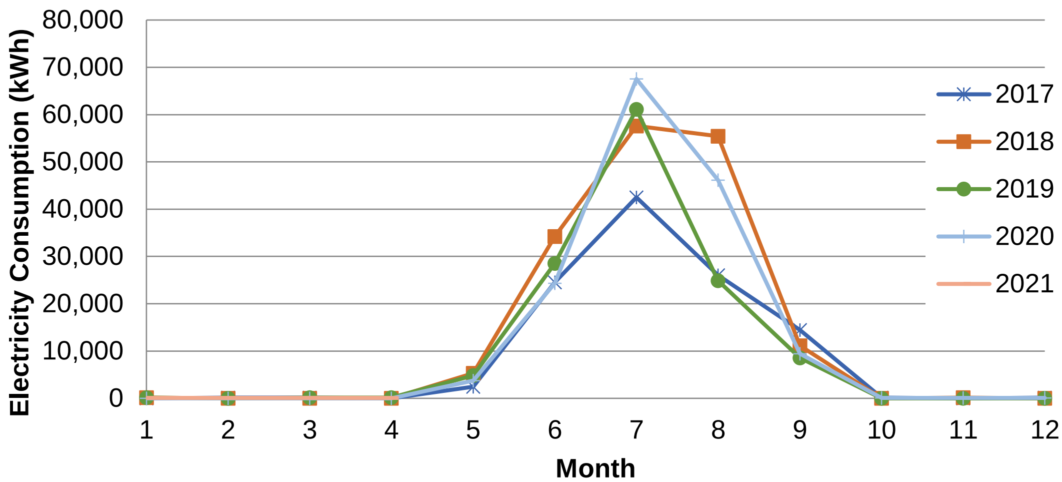

Figure 5: Air Conditioning Electricity Consumption

GHG emissions due to electricity consumption were estimated based on the current greenhouse emissions from electricity generation in Ontario. The factor that was used for the calculations was 43kgCO_{2e}/MWh. To that end, the GHG emissions of the existing building from electricity consumption was estimated. Figure 6 below identifies the total GHG emissions from the main meter and air conditioning meter respectively. The average annual emissions from electricity is 39,204kgCO_{2e}.

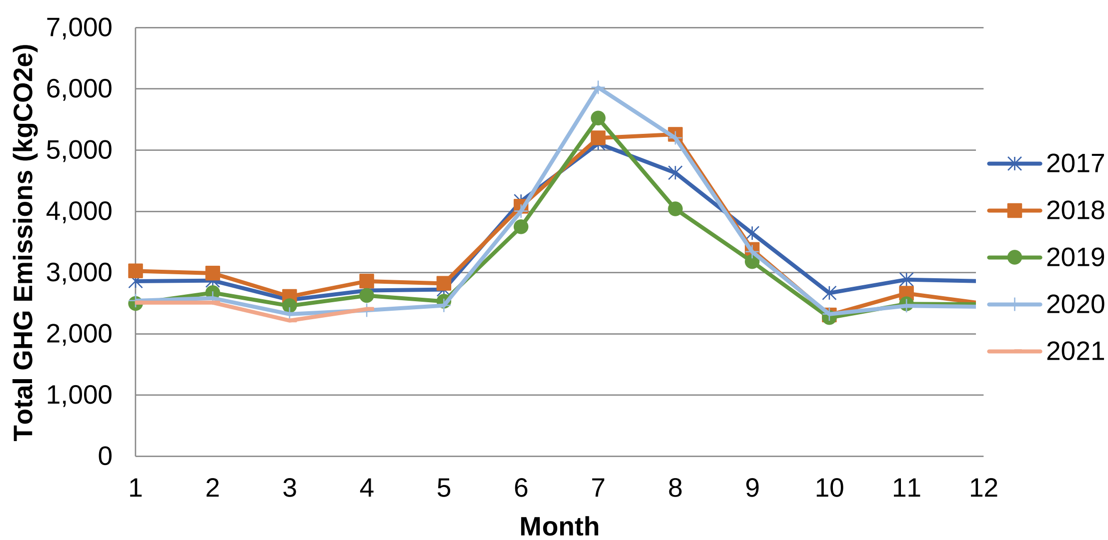

Figure 6: Total Electricity GHG Emissions

Natural Gas Analysis

Annual natural gas consumption at 25 St. Mary is measured by a single meter. The monthly consumption pattern follows a typical residential building with natural gas heating. The consumption is high during the winter months and low during summer. A factor of 1.891kgCO_{2e}/m^3 was used to calculate the GHG emissions from natural gas consumption. Natural gas emissions have remained consistent in the years for which data was made available – averaging 945,369kgCO_{2e}.

The total emissions for the site were therefore 984,573kgCO_{2e} annually.25 St Mary currently has 259 suites. This means that the building currently emits 3,801kgCO2e/unit per year. Natural gas contributes to 96% of the building's total GHG emissions. This result is expected based on the building type and heating system.

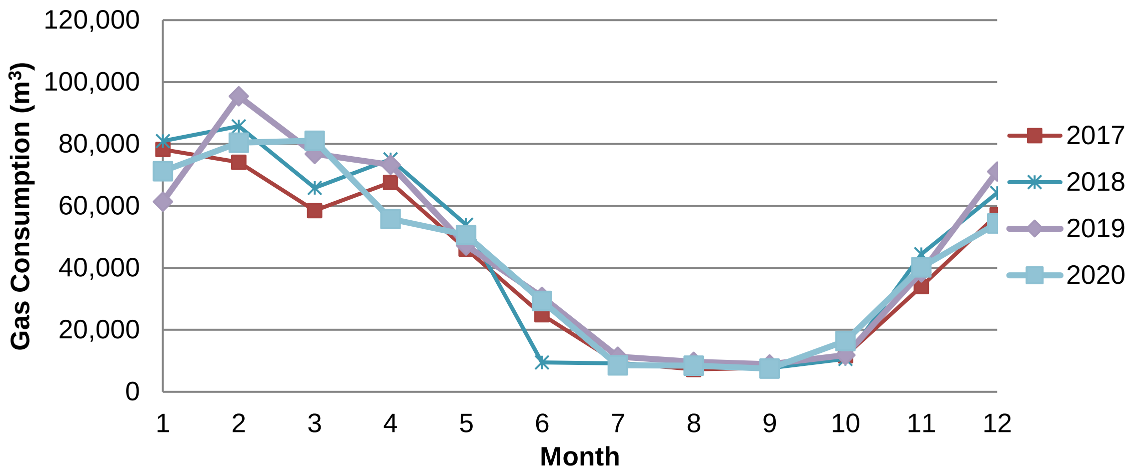

Figure 7: Monthly Natural Gas Consumption

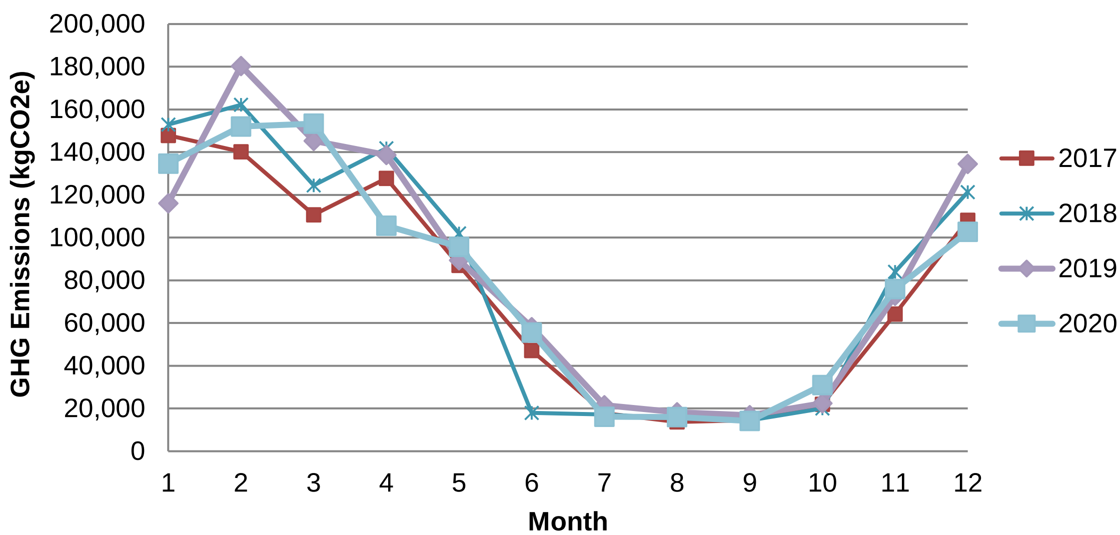

Figure 8: Natural Gas GHG Emissions

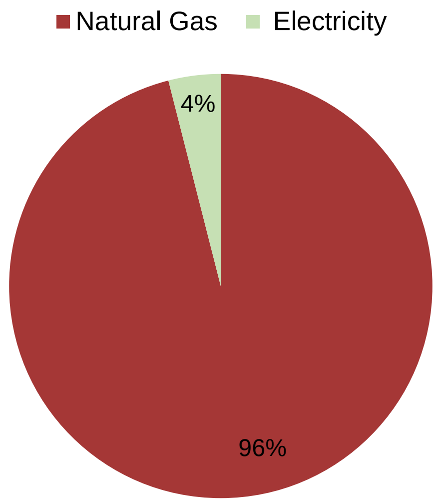

Figure 9: Greenhouse Gas Emissions by Source

APPENDIX B – PROPOSED BUILDING LCA MODEL INPUTS SUMMARY

ENVELOPE AND GLAZING

System	Information
Walls	Window Wall (Kawneer), with vision glazing and opaque spandrels Curtain Wall (Kawneer), with vision glazing and opaque spandrels Pre-cast concrete wall with XPS Insulation
Glazing	Assumed an overall 40% window-to-wall ratio
Roof	Concrete structure with concrete topper, XPS insulation, and modified bitumen membrane
Comments	Additional green roof materials are not accounted for in analysis Curtain and window wall systems use specific products from Kawneer Deep caps are not accounted for in analysis Glazing fritting, coatings, and gas fill are not accounted for in analysis

STRUCTURE

System	Information
Interior Floor	Concrete slab with rebar
Slab on Grade	Concrete slab with rebar
Foundations	*See parking structure*
Columns and Beams	Concrete, as per One Click LCA Carbon Designer
Stairs / Elevator Cores	As per One Click LCA Carbon Designer
Comments	As structural details are not fully available, the One Click LCA Carbon Designer tool was utilized for the calculation of potential structural details including amount of rebar, volume of concrete required for columns and concrete core for stairs and elevator

MISCELLANEOUS

System	Information
Interior Partitions	Metal stud framing with drywall, as per One Click LCA Carbon Designer
Balcony Railing	Glass railings, does not account for framing Pre-cast concrete colonnade
Parking Structure	Concrete structure, strip footings, and limited insulation near grade connections and slabs. Created using the One Click LCA Carbon Designer

ENVIRONMENTAL PRODUCT DECLARATIONS

The selection for each building material was selected to be industry wide environmental product declarations or data sets as available by One Click LCA whenever possible, including typical selections such as recycled content. Any product specific environmental product data used is noted within this appendix.

For the initial LCA exercise, industry average data was used based on available documentation within One Click LCA, as such the associated emissions values may be expected to be conservative in most cases. The design development for the project efforts will be made to provide the most accurate data available.

APPENDIX C – PROPOSED BUILDING LCA MODEL INPUTS MATERIALS

See the following pages for bill of materials.

Footprint 21404- 001 25 St Mary Life Cycle Carbon - North America (Metric units)

Section	Resource	User input	Unit	Global warm	Question	Thickness m	Service life	Omniclass	Constructior	Resource ty	Datasource	Name
A1-A3	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	126	m3	57831.48	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
A1-A3	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	219	m3	100516.62	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	25414	kg	15983.1	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	44256	kg	27833.02	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	71280	kg	44828.66	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	89100	kg	56035.83	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	859320	kg	115276.92	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	1074150	kg	144096.15	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	126	m3	7132.77	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
A4	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	219	m3	12397.44	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	25414	kg	511.77	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	44256	kg	891.2	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	71280	kg	1435.39	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	89100	kg	1794.24	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	859320	kg	20268.96	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	1074150	kg	25336.2	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	126	m3	2906.31	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
A5	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	219	m3	5051.44	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	25414	kg	824.68	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	44256	kg	1436.1	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	71280	kg	2313.02	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	89100	kg	2891.27	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
A5	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	859320	kg	6296.32	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	1074150	kg	7870.4	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	126	m3	0	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
B3	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	219	m3	0	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	25414	kg	0	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	44256	kg	0	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	71280	kg	0	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	89100	kg	0	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
B3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	859320	kg	0	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	1074150	kg	0	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	126	m3	3347.06	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
C3-C4	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	219	m3	5817.51	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	25414	kg	196.96	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	44256	kg	342.98	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	71280	kg	552.42	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	89100	kg	690.53	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	859320	kg	9511.23	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	1074150	kg	11889.04	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	126	m3	-3000.29	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
D	Ready-mix concrete, 40MPa Industry Average Benchmark (CRMCA	219	m3	-5214.79	Columns and load-bearing vertical structures	203.2	As building	21-02 10 10 1	Columns	Ready-mix co	EPD READY	Ready-mix concrete
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	25414	kg	-3941.03	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	44256	kg	-6862.92	Columns and load-bearing vertical structures		As building	21-02 10 10 1	Columns	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	71280	kg	-11053.61	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	89100	kg	-13817.02	Columns and load-bearing vertical structures		As building	Not defined	Concrete colu	Reinforcemen	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	859320	kg	-7923.34	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	1074150	kg	-9904.17	Columns and load-bearing vertical structures	200	As building	Not defined	Concrete colu	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generic
				624339.03	**Columns and load-bearing vertical structures**							
A1-A3	Precast concrete, architectural wall pane	27	m2	3801.75	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A1-A3	Precast concrete, architectural wall pane	27	m2	3801.75	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A1-A3	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	78	ton	295478.62	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A1-A3	Precast concrete, architectural wall pane	98.7	m2	13897.49	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A1-A3	Anodized aluminum curtainwall extrusio	106	ton	163372.64	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A1-A3	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	124	ton	469735.23	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A1-A3	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	148	ton	560651.73	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A1-A3	Anodized aluminum curtainwall extrusio	169	ton	260471.48	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A1-A3	Anodized aluminum curtainwall extrusio	202	ton	311332.78	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A1-A3	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	5932.44	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A1-A3	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	9485.77	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A1-A3	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	11360.05	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A1-A3	Mineral fiber batt insulation, 6.89i	51698	m2	284931.4	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A1-A3	Mineral fiber batt insulation, 6.89i	82664	m2	455599.23	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A1-A3	Mineral fiber batt insulation, 6.89i	98981	m2	545529.7	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A4	Precast concrete, architectural wall pane	27	m2	91.43	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A4	Precast concrete, architectural wall pane	27	m2	91.43	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A4	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	78	ton	1570.71	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A4	Precast concrete, architectural wall pane	98.7	m2	334.24	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A4	Anodized aluminum curtainwall extrusio	106	ton	2134.56	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A4	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	124	ton	2497.03	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A4	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	148	ton	2980.33	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A4	Anodized aluminum curtainwall extrusio	169	ton	3403.21	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A4	Anodized aluminum curtainwall extrusio	202	ton	4067.75	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A4	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	53.36	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A4	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	85.33	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A4	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	102.18	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A4	Mineral fiber batt insulation, 6.89i	51698	m2	2012.65	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A4	Mineral fiber batt insulation, 6.89i	82664	m2	3218.18	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A4	Mineral fiber batt insulation, 6.89i	98981	m2	3853.42	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A5	Precast concrete, architectural wall pane	27	m2	0	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A5	Precast concrete, architectural wall pane	27	m2	0	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A5	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	78	ton	22395.82	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A5	Precast concrete, architectural wall pane	98.7	m2	0	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A5	Anodized aluminum curtainwall extrusio	106	ton	12572.2	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A5	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	124	ton	35603.61	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A5	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	148	ton	42494.63	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin
A5	Anodized aluminum curtainwall extrusio	169	ton	20044.36	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A5	Anodized aluminum curtainwall extrusio	202	ton	23958.35	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
A5	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	622.26	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A5	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	994.97	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A5	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	1191.56	External walls and facade	1.52	35	21-02 20 20.	SpandrelPane	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered
A5	Mineral fiber batt insulation, 6.89i	51698	m2	24132.09	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A5	Mineral fiber batt insulation, 6.89i	82664	m2	38586.7	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
A5	Mineral fiber batt insulation, 6.89i	98981	m2	46203.3	External walls and facade	175	60	21-02 20 20.	SpandrelPane	Rock wool ins	Quartz 2015	Mineral fiber batt insulation
B3	Precast concrete, architectural wall pane	27	m2	0	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
B3	Precast concrete, architectural wall pane	27	m2	0	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
B3	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	78	ton	0	External walls and facade		As building	21-02 20 20.	SpandrelPane	Aluminium	EPD ROLL F	Roll formed aluminum claddin

B3	Precast concrete, architectural wall pane	98.7	m2	0	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
B3	Anodized aluminum curtainwall extrusio	106	ton	0	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
B3	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	124	ton	0	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
B3	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	148	ton	0	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
B3	Anodized aluminum curtainwall extrusio	169	ton	0	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
B3	Anodized aluminum curtainwall extrusio	202	ton	0	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
B3	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	0	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
B3	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	0	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
B3	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	0	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
B3	Mineral fiber batt insulation, 6.89i	51698	m2	0	External walls and facade	175	60	21-02 20 20.	SpandrelPan	Rock wool ins	Quartz 2015	Mineral fiber batt insulatio
B3	Mineral fiber batt insulation, 6.89i	82664	m2	0	External walls and facade	175	60	21-02 20 20.	SpandrelPan	Rock wool ins	Quartz 2015	Mineral fiber batt insulatio
B3	Mineral fiber batt insulation, 6.89i	98981	m2	0	External walls and facade	175	60	21-02 20 20.	SpandrelPan	Rock wool ins	Quartz 2015	Mineral fiber batt insulatio
B4-B5	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	6222.56	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
B4-B5	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	9949.66	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
B4-B5	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	11915.61	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
C3-C4	Precast concrete, architectural wall pane	27	m2	612.42	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
C3-C4	Precast concrete, architectural wall pane	27	m2	612.42	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
C3-C4	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	78	ton	604.5	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
C3-C4	Precast concrete, architectural wall pane	98.7	m2	2238.72	External walls and facade	203.2	As building	21-02 20 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
C3-C4	Anodized aluminum curtainwall extrusio	106	ton	821.5	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
C3-C4	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	124	ton	961	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
C3-C4	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	148	ton	1147	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
C3-C4	Anodized aluminum curtainwall extrusio	169	ton	1309.75	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
C3-C4	Anodized aluminum curtainwall extrusio	202	ton	1565.5	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
C3-C4	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	204.24	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
C3-C4	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	326.58	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
C3-C4	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	391.1	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
C3-C4	Mineral fiber batt insulation, 6.89i	51698	m2	13480.67	External walls and facade	175	60	21-02 20 20.	SpandrelPan	Rock wool ins	Quartz 2015	Mineral fiber batt insulatio
C3-C4	Mineral fiber batt insulation, 6.89i	82664	m2	21555.3	External walls and facade	175	60	21-02 20 20.	SpandrelPan	Rock wool ins	Quartz 2015	Mineral fiber batt insulatio
C3-C4	Mineral fiber batt insulation, 6.89i	98981	m2	25810.09	External walls and facade	175	60	21-02 20 20.	SpandrelPan	Rock wool ins	Quartz 2015	Mineral fiber batt insulatio
D	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	78	ton	56431.05	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
D	Anodized aluminum curtainwall extrusio	106	ton	771974.56	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
D	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	124	ton	89710.9	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
D	Roll formed aluminum cladding, 4.91 kg/m2 (Metal Construction Associatio	148	ton	107074.3	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	EPD ROLL F	Roll formed aluminum claddin
D	Anodized aluminum curtainwall extrusio	169	ton	1230789.63	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
D	Anodized aluminum curtainwall extrusio	202	ton	1471121.33	External walls and facade		As building	21-02 20 20.	SpandrelPan	Aluminium	Quartz 2015	Anodized aluminum curtainwall extrusio
D	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	2127	m2	21906.11	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
D	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	3401	m2	35027.12	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
D	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhered), 60 mils: 2.07 kg/m2 (	4073	m2	41948.09	External walls and facade	1.52	35	21-02 20 20.	SpandrelPan	Plastic memb	EPD EPDM N	EPDM Non-Reinforced Single Ply Waterproofing Roof Membrane (Fully Adhere
				3763910.53	**External walls and facade**							
A1-A3	Foundation waterproofing sheet membrane, 0.08i	2930	m2	15966.38	Foundation, sub-surface, basement and retaining wall	5	As building	21-01 20 10.	Concrete san	Bitumen and	Quartz 2015	Foundation waterproofing sheet membran
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	70891.69	Foundation, sub-surface, basement and retaining wall	90	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	63014.83	Foundation, sub-surface, basement and retaining wall	80	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A1-A3	Styrofoam insulation, 1.3-3.0 pcf (Dow	2930	m2	40286.32	Foundation, sub-surface, basement and retaining wall	152.4	60	21-01 20 10.	Concrete san	XPS (extrude	Styrofoam Ins	Styrofoam insulatio
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A61	19924	kg	12530.39	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A61	22415	kg	14097	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A61	308265	kg	193870.77	Foundation, sub-surface, basement and retaining wall		As building	Not defined	Footing founc	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	4736765	kg	484546.11	Foundation, sub-surface, basement and retaining wall	200	As building	Not defined	Footing founc	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A4	Foundation waterproofing sheet membrane, 0.08i	2930	m2	205.32	Foundation, sub-surface, basement and retaining wall	5	As building	21-01 20 10.	Concrete san	Bitumen and	Quartz 2015	Foundation waterproofing sheet membran
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	14927.87	Foundation, sub-surface, basement and retaining wall	90	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	13269.22	Foundation, sub-surface, basement and retaining wall	80	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A4	Styrofoam insulation, 1.3-3.0 pcf (Dow	2930	m2	156.44	Foundation, sub-surface, basement and retaining wall	152.4	60	21-01 20 10.	Concrete san	XPS (extrude	Styrofoam Ins	Styrofoam insulatio
A4	Reinforcement steel (rebar), generic, 90% recycled content, A61	19924	kg	401.22	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A61	22415	kg	451.38	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A61	308265	kg	6207.64	Foundation, sub-surface, basement and retaining wall		As building	Not defined	Footing founc	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	4736765	kg	111727.05	Foundation, sub-surface, basement and retaining wall	200	As building	Not defined	Footing founc	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A5	Foundation waterproofing sheet membrane, 0.08i	2930	m2	1708.27	Foundation, sub-surface, basement and retaining wall	5	As building	21-01 20 10.	Concrete san	Bitumen and	Quartz 2015	Foundation waterproofing sheet membran
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	4076.83	Foundation, sub-surface, basement and retaining wall	90	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	3623.85	Foundation, sub-surface, basement and retaining wall	80	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
A5	Styrofoam insulation, 1.3-3.0 pcf (Dow	2930	m2	1645.47	Foundation, sub-surface, basement and retaining wall	152.4	60	21-01 20 10.	Concrete san	XPS (extrude	Styrofoam Ins	Styrofoam insulatio
A5	Reinforcement steel (rebar), generic, 90% recycled content, A61	19924	kg	646.53	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A61	22415	kg	727.36	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A61	308265	kg	10003.13	Foundation, sub-surface, basement and retaining wall		As building	Not defined	Footing founc	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	4736765	kg	28671.27	Foundation, sub-surface, basement and retaining wall	200	As building	Not defined	Footing founc	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
B3	Foundation waterproofing sheet membrane, 0.08i	2930	m2	0	Foundation, sub-surface, basement and retaining wall	5	As building	21-01 20 10.	Concrete san	Bitumen and	Quartz 2015	Foundation waterproofing sheet membran
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	0	Foundation, sub-surface, basement and retaining wall	90	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	0	Foundation, sub-surface, basement and retaining wall	80	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
B3	Styrofoam insulation, 1.3-3.0 pcf (Dow	2930	m2	0	Foundation, sub-surface, basement and retaining wall	152.4	60	21-01 20 10.	Concrete san	XPS (extrude	Styrofoam Ins	Styrofoam insulatio
B3	Reinforcement steel (rebar), generic, 90% recycled content, A61	19924	kg	0	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A61	22415	kg	0	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A61	308265	kg	0	Foundation, sub-surface, basement and retaining wall		As building	Not defined	Footing founc	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	4736765	kg	0	Foundation, sub-surface, basement and retaining wall	200	As building	Not defined	Footing founc	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
C3-C4	Foundation waterproofing sheet membrane, 0.08i	2930	m2	785.85	Foundation, sub-surface, basement and retaining wall	5	As building	21-01 20 10.	Concrete san	Bitumen and	Quartz 2015	Foundation waterproofing sheet membran
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	7004.92	Foundation, sub-surface, basement and retaining wall	90	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	6226.59	Foundation, sub-surface, basement and retaining wall	80	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
C3-C4	Styrofoam insulation, 1.3-3.0 pcf (Dow	2930	m2	598.75	Foundation, sub-surface, basement and retaining wall	152.4	60	21-01 20 10.	Concrete san	XPS (extrude	Styrofoam Ins	Styrofoam insulatio
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A61	19924	kg	154.41	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A61	22415	kg	173.72	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A61	308265	kg	2389.05	Foundation, sub-surface, basement and retaining wall		As building	Not defined	Footing founc	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	4736765	kg	52428.04	Foundation, sub-surface, basement and retaining wall	200	As building	Not defined	Footing founc	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	-5930.34	Foundation, sub-surface, basement and retaining wall	90	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	2930	m2	-5271.41	Foundation, sub-surface, basement and retaining wall	80	As building	21-01 20 10.	Concrete san	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
D	Reinforcement steel (rebar), generic, 90% recycled content, A61	19924	kg	-3089.68	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A61	22415	kg	-3475.96	Foundation, sub-surface, basement and retaining wall		As building	21-01 20 10.	Concrete san	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A61	308265	kg	-47803.62	Foundation, sub-surface, basement and retaining wall		As building	Not defined	Footing founc	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	4736765	kg	-43830.57	Foundation, sub-surface, basement and retaining wall	200	As building	Not defined	Footing founc	Ready-mix co	One Click LC	Ready-mix concrete, normal-strength, generi
				1016067.52	**Foundation, sub-surface, basement and retaining walls**							
A1-A3	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	774	m2	43192.66	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A1-A3	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gy	774	m2	2549.37	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A1-A3	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	774	m2	5263.2	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A1-A3	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	774	m2	64559.34	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix co	EPD READY-	Ready-mix concrete
A1-A3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	774	m2	622.7	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
A1-A3	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	778	m2	43415.88	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A1-A3	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gy	778	m2	2562.54	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A1-A3	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	778	m2	5290.4	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A1-A3	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	778	m2	64892.98	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix co	EPD READY-	Ready-mix concrete
A1-A3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	778	m2	625.91	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
A1-A3	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	1106	m2	61719.75	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 20.	Amenity Roof	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A1-A3	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gy	1106	m2	3642.9	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 20.	Amenity Roof	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A1-A3	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	1106	m2	7520.8	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere

A1-A3	Pavers, 139 sq. in, T min 2.36 in, 2300 kg/m3, Light grey (Permacor	1106	m2	37124.44	Floor slabs, ceilings, roofing decks, beams and roo	59.94	As building	21-02 10 20.	Amenity Roof	Other precast	EPD CASSAI	Pavers
A1-A3	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	1106	m2	92251.46	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Amenity Roof	Ready-mix cc	EPD READY-	Ready-mix concrete
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	4000	m2	109254.39	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	EPS insulation, 1.02ir	4000	m2	6267.45	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	EPS (expand	Quartz 2015	EPS insulation
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	10153	m2	598232.69	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	27859	kg	17520.79	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	28008	kg	17614.5	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	35360	kg	22238.24	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-01 40 10.	Ground slab,	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	35411	m2	2086478.64	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Reinforcement steel (rebar), 7850 kg/m3 (Gerdau, Whitby plant	39816	kg	30618.5	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Reinforcemer	EPD Gerdau	Reinforcement steel (rebar)
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	40268	m2	2372661.65	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	243672	kg	153247.62	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	412720	kg	259563.5	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	683400	kg	429796.7	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	849852	kg	534479.94	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	966432	kg	607798.2	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	5063520	kg	679266.14	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	8384400	kg	1124758.86	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	774	m2	130.87	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A4	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	774	m2	53.26	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A4	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	774	m2	62.92	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A4	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	774	m2	8763.12	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY-	Ready-mix concrete
A4	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	774	m2	492.62	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
A4	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	778	m2	131.54	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A4	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	778	m2	53.54	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A4	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	778	m2	63.25	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A4	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	778	m2	8808.41	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY-	Ready-mix concrete
A4	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	778	m2	495.16	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
A4	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	1106	m2	187	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 20.	Amenity Roof	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A4	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	1106	m2	76.11	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 20.	Amenity Roof	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A4	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	1106	m2	89.91	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A4	Pavers, 139 sq. in, T min 2.36 in, 2300 kg/m3, Light grey (Permacor	1106	m2	1058.78	Floor slabs, ceilings, roofing decks, beams and roo	59.94	As building	21-02 10 20.	Amenity Roof	Other precast	EPD CASSAI	Pavers
A4	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	1106	m2	12521.98	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Amenity Roof	Ready-mix cc	EPD READY-	Ready-mix concrete
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	4000	m2	23006.02	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	EPS insulation, 1.02ir	4000	m2	106.8	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	EPS (expand	Quartz 2015	EPS insulation
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	10153	m2	137941	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	27859	kg	561.01	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	28008	kg	564.01	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	35360	kg	712.06	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-01 40 10.	Ground slab,	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	35411	m2	481102	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Reinforcement steel (rebar), 7850 kg/m3 (Gerdau, Whitby plant	39816	kg	801.79	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Reinforcemer	EPD Gerdau	Reinforcement steel (rebar)
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	40268	m2	547090.32	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	243672	kg	4906.91	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	412720	kg	8311.09	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	683400	kg	13761.87	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	849852	kg	17113.78	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	966432	kg	19461.39	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	5063520	kg	119434.29	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	8384400	kg	197764.56	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	774	m2	2759.43	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A5	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	774	m2	373.98	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A5	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	774	m2	536.45	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A5	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	774	m2	3310.97	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY-	Ready-mix concrete
A5	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
A5	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	778	m2	2773.69	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A5	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	778	m2	375.91	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A5	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	778	m2	539.22	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A5	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	778	m2	3328.08	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY-	Ready-mix concrete
A5	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
A5	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	1106	m2	3943.06	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 20.	Amenity Roof	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
A5	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	1106	m2	534.39	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 20.	Amenity Roof	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
A5	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	1106	m2	766.55	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
A5	Pavers, 139 sq. in, T min 2.36 in, 2300 kg/m3, Light grey (Permacor	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	59.94	As building	21-02 10 20.	Amenity Roof	Other precast	EPD CASSAI	Pavers
A5	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	1106	m2	4731.18	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Amenity Roof	Ready-mix cc	EPD READY-	Ready-mix concrete
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	4000	m2	6282.99	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	EPS insulation, 1.02ir	4000	m2	273.92	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	EPS (expand	Quartz 2015	EPS insulation
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	10153	m2	35398.26	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	27859	kg	904.02	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	28008	kg	908.85	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	35360	kg	1147.42	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-01 40 10.	Ground slab,	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	35411	m2	123459.85	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Reinforcement steel (rebar), 7850 kg/m3 (Gerdau, Whitby plant	39816	kg	1553.55	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Reinforcemer	EPD Gerdau	Reinforcement steel (rebar)
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	40268	m2	140393.7	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	243672	kg	7907.1	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	412720	kg	13392.67	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	683400	kg	22176.17	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	849852	kg	27577.5	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	966432	kg	31360.5	Floor slabs, ceilings, roofing decks, beams and roo		As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	5063520	kg	37100.88	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	8384400	kg	61433.28	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
B3	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
B3	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
B3	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY-	Ready-mix concrete
B3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
B3	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
B3	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
B3	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
B3	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY-	Ready-mix concrete
B3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 10 10 1	Roof_R1	Sand, soil an	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
B3	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	150	75	21-02 10 20.	Amenity Roof	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
B3	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	12.7	As building	21-02 10 20.	Amenity Roof	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
B3	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 20.	Amenity Roof	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
B3	Pavers, 139 sq. in, T min 2.36 in, 2300 kg/m3, Light grey (Permacor	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	59.94	As building	21-02 10 20.	Amenity Roof	Other precast	EPD CASSAI	Pavers
B3	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200	As building	21-02 20 10.	Amenity Roof	Ready-mix cc	EPD READY-	Ready-mix concrete
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	4000	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	EPS insulation, 1.02ir	4000	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	101.6	As building	21-01 40 10.	Ground slab,	EPS (expand	Quartz 2015	EPS insulation
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	10153	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	240	As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	27859	kg	0	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	28008	kg	0	Floor slabs, ceilings, roofing decks, beams and roo		As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic

B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	35360	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-01 40 10.	Ground slab,	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	35411	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Reinforcement steel (rebar), 7850 kg/m3 (Gerdau, Whitby plant	39816	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 20.	Amenity Roof	Reinforcemer	EPD Gerdau	Reinforcement steel (rebar)
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	40268	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	243672	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	412720	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	683400	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	849852	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	966432	kg	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	5063520	kg	0	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	8384400	kg	0	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	774	m2	25582.47	Floor slabs, ceilings, roofing decks, beams and roo	150	75		21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
C3-C4	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	774	m2	356.74	Floor slabs, ceilings, roofing decks, beams and roo	12.7		As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
C3-C4	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
C3-C4	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	774	m2	4112.1	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY	Ready-mix concrete
C3-C4	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	774	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 10 10 1	Roof_R1	Sand, soil anc	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
C3-C4	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	778	m2	25714.68	Floor slabs, ceilings, roofing decks, beams and roo	150	75		21-02 10 10 1	Roof_R1	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
C3-C4	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	778	m2	358.59	Floor slabs, ceilings, roofing decks, beams and roo	12.7		As building	21-02 10 10 1	Roof_R1	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
C3-C4	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 10 1	Roof_R1	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
C3-C4	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	778	m2	4133.35	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY	Ready-mix concrete
C3-C4	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m	778	m2	0	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 10 10 1	Roof_R1	Sand, soil anc	One Click LC	Aggregate (crushed gravel), generic, dry bulk densit
C3-C4	Polyisocyanurate (PIR) insulation boards, high-density, 2.69kg/m2 (5.93lb/m2), 28.8mm (1.13in), 1m2K/	1106	m2	36555.83	Floor slabs, ceilings, roofing decks, beams and roo	150	75		21-02 10 20.	Amenity Roof	PIR (polyisoc	EPD Polyiso	Polyisocyanurate (PIR) insulation boards, high-densit
C3-C4	Gypsum board with glass mat sheathing, 1/2in, 2.03 lb/ft2, DensDeck® Roof Board (Georgia-Pacific Gyp	1106	m2	509.76	Floor slabs, ceilings, roofing decks, beams and roo	12.7		As building	21-02 10 20.	Amenity Roof	Specialty gyp	EPD Georgia	Gypsum board with glass mat sheathin
C3-C4	SBS polymer-modified bitumen membrane roofing, self-adhered, 6.69 kg/m2 (Certain Teed, Henry, IKO,	1106	m2	0	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 20.	Amenity Roof	Bitumen and	EPD SBS-mc	SBS polymer-modified bitumen membrane roofing, self-adhere
C3-C4	Pavers, 139 sq. in, T min 2.36 in, 2300 kg/m3, Light grey (Permacor	1106	m2	1687.65	Floor slabs, ceilings, roofing decks, beams and roo	59.94		As building	21-02 10 20.	Amenity Roof	Other precast	EPD CASSAI	Pavers
C3-C4	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	1106	m2	5875.95	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 20 10.	Amenity Roof	Ready-mix cc	EPD READY	Ready-mix concrete
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	4000	m2	10795.6	Floor slabs, ceilings, roofing decks, beams and roo	101.6		As building	21-01 40 10.	Ground slab,	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	EPS insulation, 1.02in	4000	m2	408.75	Floor slabs, ceilings, roofing decks, beams and roo	101.6		As building	21-01 40 10.	Ground slab,	EPS (expand	Quartz 2015	EPS insulation
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	10153	m2	64728.96	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	27859	kg	215.91	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	28008	kg	217.06	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	35360	kg	274.04	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-01 40 10.	Ground slab,	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	35411	m2	225757.63	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Reinforcement steel (rebar), 7850 kg/m3 (Gerdau, Whitby plant	39816	kg	123.03	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 20.	Amenity Roof	Reinforcemer	EPD Gerdau	Reinforcement steel (rebar)
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	40268	m2	256722.72	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	243672	kg	1888.46	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	412720	kg	3198.58	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	683400	kg	5296.35	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	849852	kg	6586.35	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	966432	kg	7489.85	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	5063520	kg	56044.67	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	8384400	kg	92801.23	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	774	m2	-3686.07	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY	Ready-mix concrete
D	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	778	m2	-3705.12	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 20 10.	Roof_R1	Ready-mix cc	EPD READY	Ready-mix concrete
D	Pavers, 139 sq. in, T min 2.36 in, 2300 kg/m3, Light grey (Permacor	1106	m2	-1454.62	Floor slabs, ceilings, roofing decks, beams and roo	59.94		As building	21-02 10 20.	Amenity Roof	Other precast	EPD CASSAI	Pavers
D	Ready-mix concrete, 35MPa Industry Average Benchmark (CRMCA	1106	m2	-5267.18	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	21-02 20 10.	Amenity Roof	Ready-mix cc	EPD READY	Ready-mix concrete
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 0% recycled binders in cement	4000	m2	-9139.51	Floor slabs, ceilings, roofing decks, beams and roo	101.6		As building	21-01 40 10.	Ground slab,	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	10153	m2	-54114.31	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	27859	kg	-4320.18	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	28008	kg	-4343.29	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 10 1	Roof_R1	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	35360	kg	-5483.39	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-01 40 10.	Ground slab,	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	35411	m2	-188736.51	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Reinforcement steel (rebar), 7850 kg/m3 (Gerdau, Whitby plant	39816	kg	-2179.2	Floor slabs, ceilings, roofing decks, beams and roo			As building	21-02 10 20.	Amenity Roof	Reinforcemer	EPD Gerdau	Reinforcement steel (rebar)
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	40268	m2	-214623.75	Floor slabs, ceilings, roofing decks, beams and roo	240		As building	Not defined	In-situ concre	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	243672	kg	-37786.98	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	412720	kg	-64001.79	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	683400	kg	-105976.99	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	Concrete bea	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	849852	kg	-131789.23	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	966432	kg	-149867.65	Floor slabs, ceilings, roofing decks, beams and roo			As building	Not defined	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	5063520	kg	-46688.05	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C40/50 (5800/7300 PSI), 10% (typical) recycled binders i	8384400	kg	-77308.14	Floor slabs, ceilings, roofing decks, beams and roo	200		As building	Not defined	Concrete bea	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
				10857712	**Floor slabs, ceilings, roofing decks, beams and roof**								
A1-A3	Precast concrete, architectural wall pane	23	m2	3238.52	Internal walls and non-bearing structure	203.2		As building	21-03 10 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	642	m2	23642.36	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	8186	kg	5148.25	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	26272	m2	967495.39	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	29082	m2	1070976.74	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	78816	m2	231875.69	Internal walls and non-bearing structure	12.7		As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	87246	m2	256676.65	Internal walls and non-bearing structure	12.7		As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
A1-A3	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	160785	kg	228006.57	Internal walls and non-bearing structure	101.6		As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
A1-A3	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	177982	kg	252393.35	Internal walls and non-bearing structure	101.6		As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	334968	kg	210664.53	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	370796	kg	233197.1	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Precast concrete, architectural wall pane	23	m2	77.89	Internal walls and non-bearing structure	203.2		As building	21-03 10 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	642	m2	5451.47	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	8186	kg	164.84	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	26272	m2	223085.9	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	29082	m2	246946.72	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	78816	m2	5963.81	Internal walls and non-bearing structure	12.7		As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	87246	m2	6601.69	Internal walls and non-bearing structure	12.7		As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
A4	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	160785	kg	3237.79	Internal walls and non-bearing structure	101.6		As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
A4	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	177982	kg	3584.09	Internal walls and non-bearing structure	101.6		As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	334968	kg	6745.37	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	370796	kg	7466.85	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Precast concrete, architectural wall pane	23	m2	0	Internal walls and non-bearing structure	203.2		As building	21-03 10 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	642	m2	1398.95	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	8186	kg	265.63	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	26272	m2	57248.05	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	29082	m2	63371.19	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	78816	m2	35177.37	Internal walls and non-bearing structure	12.7		As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	87246	m2	38939.88	Internal walls and non-bearing structure	12.7		As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
A5	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	160785	kg	7737.29	Internal walls and non-bearing structure	101.6		As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
A5	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	177982	kg	8564.84	Internal walls and non-bearing structure	101.6		As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	334968	kg	10869.63	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	370796	kg	12032.25	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Precast concrete, architectural wall pane	23	m2	0	Internal walls and non-bearing structure	203.2		As building	21-03 10 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	642	m2	0	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	8186	kg	0	Internal walls and non-bearing structure			As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	26272	m2	0	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	29082	m2	0	Internal walls and non-bearing structure	150		As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic

B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	78816	m2	0	Internal walls and non-bearing structure	12.7	As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	87246	m2	0	Internal walls and non-bearing structure	12.7	As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
B3	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	160785	kg	0	Internal walls and non-bearing structure	101.6	As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
B3	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	177982	kg	0	Internal walls and non-bearing structure	101.6	As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	334968	kg	0	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	370796	kg	0	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Precast concrete, architectural wall pane	23	m2	521.69	Internal walls and non-bearing structure	203.2	As building	21-03 10 10.		Concrete wall	Architectural	Precast concrete, architectural wall pane
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	642	m2	2558.11	Internal walls and non-bearing structure	150	As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	8186	kg	63.44	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	26272	m2	104683.3	Internal walls and non-bearing structure	150	As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	29082	m2	115880.01	Internal walls and non-bearing structure	150	As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	78816	m2	39945.46	Internal walls and non-bearing structure	12.7	As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
C3-C4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 r	87246	m2	44217.94	Internal walls and non-bearing structure	12.7	As building	21-03 10 10.	Drywall metal	Regular gyps	One Click LC	Gypsum plaster board, regular, generic
C3-C4	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	160785	kg	1246.08	Internal walls and non-bearing structure	101.6	As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
C3-C4	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	177982	kg	1379.36	Internal walls and non-bearing structure	101.6	As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	334968	kg	2596	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	370796	kg	2873.67	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	642	m2	-2138.62	Internal walls and non-bearing structure	150	As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	8186	kg	-1269.43	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	26272	m2	-87516.69	Internal walls and non-bearing structure	150	As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	29082	m2	-96877.3	Internal walls and non-bearing structure	150	As building	21-03 10 10.	Load bearing	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	160785	kg	-114270.54	Internal walls and non-bearing structure	101.6	As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
D	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m3), C-p	177982	kg	-126492.52	Internal walls and non-bearing structure	101.6	As building	21-03 10 10.	Drywall metal	Structural ste	LCA based o	Steel stud framing for drywall/gypsum plasterboard per sq. meter of wall area (incl. air gaps per m
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	334968	kg	-51944.54	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	370796	kg	-57500.5	Internal walls and non-bearing structure		As building	21-03 10 10.	Load bearing	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
				4034885.33	**Internal walls and non-bearing structures**							
A1-A3	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	20	m3	6322.31	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	61	m3	14975.95	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	99	m3	24305.23	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	176	m3	43209.29	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	231	m3	56712.2	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	285	m3	69969.6	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	666	m3	163507.9	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A1-A3	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	955	m3	301890.08	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A1-A3	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	1127	m3	356261.91	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	6105	kg	3839.49	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	6278	m2	60257.55	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
A1-A3	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	7172	m2	68838.34	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	9875	kg	6210.48	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Ready-mix concrete, 30MPa Industry Average Benchmark (CRMCA	10224	m2	893782.08	Other structures and materials	250	As building	21-02 20 10.	In-situ concre	Ready-mix cc	EPD READY-	Ready-mix concrete
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	17595	kg	11065.66	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	23102	kg	14529.07	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	28463	kg	17900.65	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	66585	kg	41875.93	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	294451	kg	185183.01	Other structures and materials		As building	21-02 10 80.	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	20	m3	333.31	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	61	m3	3453.17	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	99	m3	5604.32	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	176	m3	9963.24	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	231	m3	13076.75	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	285	m3	16133.65	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	666	m3	37701.79	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A4	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	955	m3	15915.46	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A4	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	1127	m3	18781.91	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	6105	kg	122.94	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	6278	m2	435.94	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
A4	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	7172	m2	498.02	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	9875	kg	198.86	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Ready-mix concrete, 30MPa Industry Average Benchmark (CRMCA	10224	m2	144693.35	Other structures and materials	250	As building	21-02 20 10.	In-situ concre	Ready-mix cc	EPD READY-	Ready-mix concrete
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	17595	kg	354.32	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	23102	kg	465.21	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	28463	kg	573.17	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	66585	kg	1340.85	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	294451	kg	5929.47	Other structures and materials		As building	21-02 10 80.	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	20	m3	0	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	61	m3	886.15	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	99	m3	1438.17	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	176	m3	2556.75	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	231	m3	3355.74	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	285	m3	4140.2	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	666	m3	9674.99	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
A5	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	955	m3	0	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A5	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	1127	m3	0	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	6105	kg	198.11	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	6278	m2	638.79	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
A5	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	7172	m2	729.76	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	9875	kg	320.44	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Ready-mix concrete, 30MPa Industry Average Benchmark (CRMCA	10224	m2	47781.66	Other structures and materials	250	As building	21-02 20 10.	In-situ concre	Ready-mix cc	EPD READY-	Ready-mix concrete
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	17595	kg	570.95	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	23102	kg	749.65	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	28463	kg	923.62	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	66585	kg	2160.67	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	294451	kg	9554.87	Other structures and materials		As building	21-02 10 80.	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	20	m3	0	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	61	m3	0	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	99	m3	0	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	176	m3	0	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	231	m3	0	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	285	m3	0	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	666	m3	0	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
B3	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	955	m3	0	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
B3	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	1127	m3	0	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	6105	kg	0	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	6278	m2	0	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
B3	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	7172	m2	0	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	9875	kg	0	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Ready-mix concrete, 30MPa Industry Average Benchmark (CRMCA	10224	m2	0	Other structures and materials	250	As building	21-02 20 10.	In-situ concre	Ready-mix cc	EPD READY-	Ready-mix concrete
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	17595	kg	0	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	23102	kg	0	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	28463	kg	0	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic

B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	66585	kg	0	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	294451	kg	0	Other structures and materials		As building	21-02 10 80.	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
B4-B5	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	6278	m2	63879.03	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
B4-B5	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	7172	m2	72975.54	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
C3-C4	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	20	m3	531.28	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	61	m3	1620.4	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	99	m3	2629.83	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	176	m3	4675.26	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	231	m3	6136.28	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	285	m3	7570.73	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	666	m3	17691.6	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
C3-C4	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	955	m3	25368.59	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
C3-C4	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	1127	m3	29937.6	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	6105	kg	47.31	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	6278	m2	2919.91	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
C3-C4	Float glass, single pane, generic, 3-12 mm (0.12-0.47 in), 10 kg/m2 (2.05 lbs/ft2) (for 4 mm/0.16 in), 250	7172	m2	3335.71	Other structures and materials	4	35	21-02 10 80.		Regular glass	One Click LC	Float glass, single pane, generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	9875	kg	76.53	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Ready-mix concrete, 30MPa Industry Average Benchmark (CRMCA	10224	m2	67897.51	Other structures and materials	250	As building	21-02 20 10.	In-situ concre	Ready-mix cc	EPD READY-	Ready-mix concrete
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	17595	kg	136.36	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	23102	kg	179.04	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	28463	kg	220.59	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	66585	kg	516.03	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
C3-C4	Reinforcement steel (rebar), generic, 90% recycled content, A615	294451	kg	2282	Other structures and materials		As building	21-02 10 80.	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	20	m3	-432.48	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	61	m3	-1354.68	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	99	m3	-2198.58	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	176	m3	-3908.58	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	231	m3	-5130.01	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	285	m3	-6329.24	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders i	666	m3	-14790.43	Other structures and materials	200	As building	Not defined	Concrete ass	Ready-mix cc	One Click LC	Ready-mix concrete, normal-strength, generic
D	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	955	m3	-20650.92	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
D	Precast concrete wall elements (solid, uninsulated), generic, C30/37 (4400/5400 PSI), 0% (typical) recyc	1127	m3	-24370.25	Other structures and materials	200	As building	21-02 10 80.		Concrete wall	One Click LC	Precast concrete wall elements (solid, uninsulated), generi
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	6105	kg	-946.72	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	9875	kg	-1531.35	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Ready-mix concrete, 30MPa Industry Average Benchmark (CRMCA	10224	m2	-60863.06	Other structures and materials	250	As building	21-02 20 10.	In-situ concre	Ready-mix cc	EPD READY-	Ready-mix concrete
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	17595	kg	-2728.51	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	23102	kg	-3582.5	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	28463	kg	-4413.85	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	66585	kg	-10325.55	Other structures and materials		As building	Not defined	Concrete ass	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	294451	kg	-45661.44	Other structures and materials		As building	21-02 10 80.	In-situ concre	Reinforcemer	One Click LC	Reinforcement steel (rebar), generic
				2736944.37	**Other structures and materials**							
A1-A3	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	1799.76	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
A1-A3	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	2039.73	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
A1-A3	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	139	m2	47781.04	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A1-A3	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	561	m2	192842.92	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A1-A3	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	6665.6	m2	2822826.93	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
A1-A3	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	7981	m2	3379888.04	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
A1-A3	Aluminium frame curtain wall system, 34.9 kg/m2, 1600 WALL SYSTEM™ 1, 1600 WALL SYSTEM™ 2,	8482.716	m2	1070862.42	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A4	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	5.79	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
A4	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	6.56	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
A4	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	139	m2	34.36	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A4	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	561	m2	138.68	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A4	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	6665.6	m2	6092.31	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
A4	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	7981	m2	7294.58	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
A4	Aluminium frame curtain wall system, 34.9 kg/m2, 1600 WALL SYSTEM™ 1, 1600 WALL SYSTEM™ 2,	8482.716	m2	2055.72	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A5	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
A5	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
A5	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	139	m2	0	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A5	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	561	m2	0	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
A5	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	6665.6	m2	0	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
A5	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	7981	m2	0	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
A5	Aluminium frame curtain wall system, 34.9 kg/m2, 1600 WALL SYSTEM™ 1, 1600 WALL SYSTEM™ 2,	8482.716	m2	0	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
B3	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
B3	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
B3	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	139	m2	0	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
B3	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	561	m2	0	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
B3	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	6665.6	m2	0	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
B3	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	7981	m2	0	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
B3	Aluminium frame curtain wall system, 34.9 kg/m2, 1600 WALL SYSTEM™ 1, 1600 WALL SYSTEM™ 2,	8482.716	m2	0	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
B4-B5	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	1809.07	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
B4-B5	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	2050.28	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
C3-C4	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
C3-C4	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
C3-C4	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	139	m2	38.35	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
C3-C4	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	561	m2	154.78	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
C3-C4	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	6665.6	m2	2092.17	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
C3-C4	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	7981	m2	2505.04	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
C3-C4	Aluminium frame curtain wall system, 34.9 kg/m2, 1600 WALL SYSTEM™ 1, 1600 WALL SYSTEM™ 2,	8482.716	m2	2294.36	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
D	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	15	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
D	Fiberglass reinfroced polyester (FRP) door, per m2, 0.375-1.125 in / 9.5-28.6 mm glass pocket thickness	17	m2	0	Windows and doors		40	21-02 20 50.		Glass doors	EPD Fleming	Fiberglass reinfroced polyester (FRP) door, per m2
D	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	139	m2	729.33	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
D	Aluminium frame curtain wall system, 1.5m x 1.6m, 35.6 kg/m2, 1600 1, 1600 2, 1600 3, 1600 4, 1600 5	561	m2	2943.55	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
D	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	6665.6	m2	-54195.42	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
D	Window wall curtain wall system, 1.5m x 1.3m, 40.5 kg/piece, MetroView FG 501T, FG 623, TR-700 Wir	7981	m2	-64890.43	Windows and doors	127	As building	21-02 20 20.		Aluminium fra	Window wall,	Window wall curtain wall syster
D	Aluminium frame curtain wall system, 34.9 kg/m2, 1600 WALL SYSTEM™ 1, 1600 WALL SYSTEM™ 2,	8482.716	m2	41840.29	Windows and doors		As building	21-02 20 20.		Glass facades	EPD TRADIT	Aluminium frame curtain wall syster
				7528984.89	**Windows and doors**							