NHC Innovation

Mostadam ADDENDUM 2024

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Itroduction

This document is to be used with alignment to Mostadam Manual available on the Sustainable Building official website the goal of this document is to continually highlight lessons learned annually to ensure projects streamline mostadam submissions and to do further lingual clarification of some credits or providing alternative paths the cope with the aim of the credit with respect best practices , projects targeting Mostdam Certification can use Mostadam manual and use this supplement document for further clarification ~~once needed~~.

Table of Versions:

#	Code	Date	Approved by
1	ADD-24-REV00	05 January 2025	
2	ADD-24-REV001	23 June 2025	
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5	ADD-24-REV004	Aug 6, 2025	
6	ADD-24-REV005	September,24, 2025	

General Items

1. **Project Brief section as part of EI-01 Mostadm Guide/Sustainability Manual credit ,** Project team shall submit Document related to the project with narrative explaining project boundaries and brief about the project .to be attached with project submission documents.
2. **(Commissioning Review and Documentation)** ICA Approval (stamp and signed off) is to be provided on all technical evidence documents such as drawings, calculations, schedules, specifications, and materials.

3. **(Commissioning Review and Documentation)** The ICA must be engaged in the early design phases of the project. During both Design and Construction submissions, the (Cx) review logs are to be provided showing their review feedback and action taken by the project team to address their comments with a final status on all comments to be closed.

4. **(Narratives)** All credits must have a narrative explaining the project's team approach to comply with the credit requirement. Any credits submitted without a narrative will not be reviewed and shall be returned to the project team as a Revise and Resubmit. Further review of supporting evidence will be done only when a suitable narrative is provided.

5. **(Shading Analysis)** When performing shading calculations to demonstrate the percentage of the shaded area, the project team shall carefully consider the boundaries of the assessment and the applicable area to be within logic and with appropriate consideration of the applicability and function of the space. The intent is to provide comfortable outdoors wherever occupants are expected to utilize the designated outdoor area (Note: Project that need visual surveillance especially buildings defined by SBC as **Assembly** can be exclude part of crowd areas with respect to **HC-15** for commercial Buildings Safety and Security Strategies Recommendations, and for Communities **CW-05** CPTED Strategy recommendations).
6. **(Resubmission)** When re-submitting, only re-submit credits that have "Revise and Resubmit" status.

7. **(Submission Forms)** All tools ~~and forms~~ shall be comprehensively filled in and checked for consistency with the supporting documentation and calculations. Any incomplete tools/calculators/~~forms~~ will result in the rejection of the submission, and a review cycle deducted~~.~~Using Mostadm Platform Submission templates and Scorecard are no longer required.

8. **(ICA appointment)** The ICA can be part of the developer's team, PMC, or the Lead Design Consultant. However, they must not fill any other role in the project except as ICA and have the required experience. They shall report directly to the asset owner/client. The ICA cannot be part of the Design/Build/Contractor internal team but can be hired as a 3rd party that reports directly to the owner.

9. **(Project Boundaries)** A project boundary shall be defined so that it encompasses the allocated plot. It must include all land within the plot that is either impacted by or associated with the project and form a part of it's operations. The boundary shall not exclude parts of the project, allocated land, or the site in an unjustified manner to grant advantage in compliance with applicable credits. It shall include any areas or systems that are fed directly by the development's systems.

10. **(Precedents)** Sustainable Building does not accept the concept of "Precedent" on credit review findings, approval, or rejection. Each project is treated on a case-by-case basis.

11. **(Submission Documents)** When submitting ensure that Mostadam AP use Mostadam Platform click on (Browse) and upload files one by one and ensure files has been fully uploaded and ensure the file in it is exact Credit and Credit Requirement , for Mostadam Excel Tools you save it as (Excel Work Book) format instead of any other format and make sure you upload all documents and write narrative in the text box then save the statement kindly read User manual available in Mostadam official website. You may use User manual that can be found in Mostadam official website (https://mostadam.sa/ar/guides).

12. **(Evidence Documents)** It is often assumed that only the documents listed in the Evidence tables are required for the Assessor review. However, this is not the case, SB reserves the right to request additional information to ensure that credit compliance has been achieved. For project teams to avoid a Revise & Resubmit due to insufficient information provided, it is advised to avoid a "minimal effort" approach and provide comprehensive information for the Assessor team that demonstrates how the project meets the credit requirements as well as the processes and procedures described in the supporting guidance section of each credit.

13. **(Evidence Documents)** Ensure that all related documents are present in their related credit folders even if the same document is usable in multiple credits, a copy of the document should be present in each credit folder where it would be applicable.

14. **(Evidence Documents)** Sharing MOM as part of the project documentation/evidence is only considered as supporting document and is not sufficient by itself and must be

supplemented by the evidence documents as per the Mostadam Guide. Furthermore, MOMs must be signed by NHC for them to contribute to any submission as supporting document.

15. **(Renewable Energy and offsets)** Projects may utilize offsite renewable energy generation to contribute to their related renewable energy credit. The project team would account for the percentage reduction due to Renewable Energy as follows (depending on the source of the renewable energy):

- For On-site renewable energy production and Off-site renewable energy production owned by the Mostadam project owner, the project accounts for 100% of the achieved Energy consumption reduction, to get the achieved points as per the Mostadam manual.
- In the case of Off-site renewable energy production not owned by the Mostadam project owner, the project only accounts for 75% of the achieved Energy consumption reduction, to get the achieved points as per the Mostadam manual.
- The project must achieve the minimum energy savings requirement without the use of renewable energy systems.
- Project teams may purchase Renewable Energy Credits (RECs) to contribute to the related renewable energy credits (but not the energy performance credit). The RECs shall meet the following:
  - Must be purchased at the time of final submission for the project and shall be generated no more than 12 months from the date of submission.
  - Must be generated from renewable energy power plants or facility, which are no more than 10 years old.
  - The allowable renewable energy sources are: solar (PV and CSP), Wind, Geothermal, Hydro-energy.
  - Shall be verified and certified by an independent third-party. Related certification shall be presented in the submission.
  - To access the environmental advantages linked to renewable energy production, the project owner or operator needs to retire the RECs.

16. **(Mostadam AP Rating)** Sustainable Building is in the process of developing an ongoing Mostadam AP rating, this rating will be a measure of the quality, completeness, and overall structure of the submitted projects per AP (not organizations). A low rating may result in revoking the Mostadam AP certification of the professional. Further details on this will be provided soon.

17. **(Mostadam vs Local Regulations)** Where the requirements of Mostadam exceed local authority regulations and standards, then it is expected that the Mostadam requirements are to be fulfilled by the project as they satisfy and supersede the regulation.

18. **(Mostadam vs End User Requirements)** End-users are expected to be aware of and aligned with the requirements of Mostadam, and any sustainability features required by a pursued

Mostadam credit (especially Keystone credits such as water and energy metering and management systems). The requirement shall be incorporated into the project even if not required by the end-user/operator including public entity operators.

19. **(Key Stone Requirements)** No exemptions to requirements of Key Stone credits shall be entertained especially for reasons of cost or time impacts on the project. In the highly unlikely scenario that a health and safety issue or a technical impossibility for a Key Stone requirement is presented, SB will look into it on a case-by-case basis.

20. **(Exemptions/Alternate Compliance)** No exemptions or alternate compliance can be granted for any optional credits. Any credits that are not applicable to a project are not considered "automatically awarded" unless explicitly mentioned in the Mostadam References Book/Manual or this document.

21. **(Mostadam Communities and associated Buildings)** Buildings that are located within a Mostadam-rated community can utilize the compliance of the community with natural systems, environmental impact, infrastructure, accessibility, transportation, and outdoor thermal comfort requirements. For sustainable features that are considered “site-wide”. This is only acceptable if the community compliance does not present a deviation from the building level compliance and would be assessed on a case-by-case basis. The interaction of the asset and it’s location within the community is taken into consideration. Land plots and building boundaries definitions must be approved by SB prior to the submission. The approach should be extensively explained and detailed in the narratives in the submission. Below is a list of applicable credits that can be utilized:

Community Credit	Commercial Credit	Residential Credit
SA-01	SS-01	SS-01
SA-02	SS-01	SS-01
SA-03	SS-02	SS-02
SA-04	SS-04	SS-04
SA-05	SS-07	-
SA-06	SS-03	SS-03
CC-01	TC-03	TC-03
CC-04	TC-04	TC-05
CC-05	TC-02	TC-02
CW-01	SS-05 & HC-01	SS-05 & HC-01
RC-02	~~RC-01~~ RC-02	~~RC-01~~ RC-02
RC-03	~~RC-02~~ RC-01	~~RC-02~~ RC-01
EI-01	EI-01	EI-01
E-05	E-01* & E-04	E-01* & E-06
W-02	W-02	W-02

W-03	W-04	W-03
MO-02	MW-01	-

*for Renewable Energy calculations only.

22. **(Masterplan vs Building level certification)** In the case of a building pursuing Mostadam certification lies within a new construction masterplan development that is not pursuing Mostadam. Any masterplan features that are intended to contribute to the building's certification (negatively or positively) shall also be incorporated in the submission. Example: Masterplan landscape design should still be submitted for Building level certification with consideration of applicable landscape area (within a 100-meter radius of the building) or the landscape design of the masterplan as a whole. This would apply to both the selection of plants and the irrigation system. The system should be compliant with Mostadam requirements if it intends to serve landscape irrigation for areas within the building's certification boundary. This does not apply to pre-existing systems.

23. **(Walking distance and radii variances)** Sustainable Building will allow up to 15% variance in walking distances or radii required under any Mostadam Mostadam References Book/Manual.

24. **(Submission Documents)** All drawings submitted shall be in a format and level of detail that allows for easy and fast access by the assessor.

25. (Single vs Multiple Buildings)

For multiple structures to be considered as a single building the following conditions must be met:

- All structures are designed and constructed in parallel. That is the project is considered 1 project by the same developer and is only open/operational when all structures are fully constructed.
- All structures are owned by the same entity.
- The operator(s) shall follow the same policies and processes informed by the owner.
- The structures are physically connected through functional spaces (i.e. grand lobby, Mezzanine floor…etc). Distribution, parking and utility rooms are not considered functional spaces.
- They share the same end-use (i.e. all are offices, hospitality, mixed use or commercial)

26. (Campus and Group Submission Approach)

(Note: using Mostadam Platform for this approach does not mean the whole project will be registered as single project request, where each building/group of buildings shall be registered separately with coordination with SB) If multiple buildings are being developed within the same site, a group and campus certification approaches may be utilized as follows:

Campus:

For a project to be eligible for campus approach, all the buildings being developed have different end-uses (offices, retail, hospitality…etc) and they all must fall under the same Mostadam Rating Standard (example: All are applicable within Mostadam Commercial D+C).

The campus approach allows the project to submit campus credits only once for assessment and award across all the buildings.

Each building will be receiving its own certificate, as such for non-campus credits the project team must register and submit individual submissions per building.

The project team must use reasonable best judgement and effort in defining the campus boundary. The boundary definition must be confirmed by Sustainable Building prior to registration.

The following are the campus credits:

Commercial (D+C)

- All Site Sustainability credits
- All Transportation and connectivity credits
- All Region and Culture credits
- E-04 if the system feeds the site as a whole and not a specific building (or if RECs are used)
- W-02
- W-04

- HC-01
- HC-06
- HC-14 if parking is shared
- HC-15
- MW-02
- MW-03
- MW-05
- MW-06
- All Education and Innovation
- PMM-02
- PMM-03

Residential (D+C)

- All Site Sustainability Credits
- TC 01, 02, 03, 05
- All Region and Culture credits
- E-06, E-07
- HC-01, HC-09, HC-10
- All Materials and Waste
- All Education and Innovation
- PM-02

In cases where the credit requirements state a distance/radius requirement, that distance shall be calculated from the defined main entrance to the site as a whole. Where a site may have different entrances, the optimal entrance may be selected.

If the campus/site incorporates features that support any of the campus credits without the need to involve the surrounding area, the project team is permitted to utilize these features (example: Access to Amenities, the amenities may be within the campus/site or external to it).

Group Approach

Group approach applies for projects that include the development of multiple buildings within the same site in which all the buildings are of the same typology and end-use (example: all are multi-residential buildings). The buildings must all be applicable under the same Mostadam Rating Standard.

The group approach awards all the buildings a single certification, as such all buildings can fall under the same registration and submission.

The submission documents must address the collective performance of all the buildings (example: Energy performance path, the energy consumption of the proposed and baseline shall be evaluated for all the buildings combined).

27. **Mostadam Rating System and ModeScore and ActiveScore:**
Mostadam Credits can help projects targeting ModeScore or ActiveScore to get certification similarly projects certified according to Modescore or achieving Activescore may be eligible to achieve some of Mostadam requirements as per Appendix A.

28. Mostadam in some credits in this document recognize CSC (Concrete Sustainability Council) certified products and certification mentioned as follows:

- CSC Certified: Product certified by The Concrete Sustainability Council, the only global certification system that enables the concrete industry and its main suppliers – i.e. cement and aggregate industry: to communicate and demonstrate the responsible sourcing credentials of its products.
- CSC R-module: Product certified by The Concrete Sustainability Council, rewards maximizing the use of recycled material in fresh concrete.
- CO2-module: Product certified by The Concrete Sustainability Council, enables concrete suppliers to label CO2-optimized concrete with a reduction in GHG emissions

29. **(E-07 Ozone Impact for Mostadam "Commercial and Residential" Buildings D+C) : Requirements (Update to Req. 1)**

All refrigerants, fire suppression systems, and maintenance gases installed and used within the project boundary have an ODP of zero and a GWP of less than 1,500.

All projects with refrigerants of GWP between 1500-2500 to be phased out prior to January 2030, before completion of the Design stage.

Table E-07.1 Common refrigerants (update)

Refrigerant	ODP	GWP	Building Application	Status
Chlorofluorocarbons				
CFC-12	1	10,900***	Refrigerators and chillers	Not Acceptable
Hydrochlorofluorocarbons (HCFC)				
HCFC-22/R-22	0.055	1,810***	Air-Conditioners and Chillers	Not Acceptable
HCFC-123	0.02	77***	CFC-11 Replacement	Not Acceptable
Hydrofluorocarbons (HFC)				
HFC 134a	0	1,430*	CFC-12 and HCFC-22 replacement	Acceptable

HFC 152a	0	124*	Refrigeration	Acceptable
HFC 245fa	0	1,020	Insulating agent, centrifugal chillers	Acceptable
HFC 407c	0	1,700	HCFC 22 Replacement	Acceptable Until January 2030
HFC 410 a	0	1,890	Air Conditioning	Acceptable Until January 2030
HFC 417a	0	2,346 **	HCFC 22 Replacement	Acceptable Until January 2030
HFC 427a	0	2,138 **	HCFC 22 Replacement	Acceptable Until January 2030
HFC 450a	0	547	Air Conditioning	Acceptable
HFC 32	0	675*****	To replace HFC 410a	Acceptable
HFC 290 (Propane)	0	3*****		Acceptable
Hydrofluoroolefin (HFO)				
HFO 1234yf	0	<1	To replace HFC 134a	Acceptable
R-454B	0	466	To replace HFC 410 a	Acceptable
Natural Refrigerants				
Carbon Dioxide (CO2)	0	1****	Refrigeration	Acceptable
Ammonia (NH3)	0	0****	Air Conditioning	Acceptable
Propane (C3H8)	0	3	Refrigeration	Acceptable
Isobutene	0	3	Refrigeration	Acceptable
Air	0	0	Refrigeration	Acceptable
Water (R718)	0	0	Refrigeration	Acceptable

1. **Reference EPA site, Acceptable Refrigerants and their Impacts | US EPA*
2. *** Reference Australian Government, Department of Climate Change, Energy, the Environment and Water, Hydrofluorocarbon refrigerants – global warming potential values and safety classifications - DCCEEW*
3. **** Reference Ozone-Depleting Substances, https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances*
4. ***** https://www.gea.com/en/campaigns/natural-refrigerants/natural-refrigerants-climate-neutral/*
5. ******Natural selection: The rise of low GWP refrigerants | Heat pump Eurovent Certita Certification*

Table E-07.2 Fire suppression system and maintenance gases (updates)

Fire Suppression System and Maintenance Gases			
Fire Suppression	**ODP***	**GWP***	**Status**
Inergen/ IG-541	0	0	Acceptable
FM200/ HFC-227ea	0	3,500	Not Acceptable

FK-5-1-12 /Novec 1230	0	< 1	Acceptable
ATK OS-10	0	<1	Acceptable
Carbon Dioxide	0	1	Acceptable
Firebane 1179	0	0	Acceptable
HFC-125/FE 25	0	3,500	Not Acceptable
IG -01, 55, 100	0	0	Acceptable
N2 Towers System	0	<1	Acceptable
HFC-134a (component in HFC Blend B)	0	1,300	Acceptable
PhostrEx	0.01 – 0.08	0	Not Acceptable
Halon 1211	3	1,750	Not Acceptable
Halon 1301	10	7,140	Not Acceptable
HBFC-22B1/FM-100	0.74	N/A	Not Acceptable
HCFC-22/R-22	0.055	1,760	Not Acceptable
HFC-32	0	675	Acceptable
CFC-11	1	4,750	Not Acceptable
HCFC-123	0.02	79	Not Acceptable

1. **Reference Montreal Protocol on Substances that deplete the Ozone layer, Report of the Halons technical options committee, December 2018, HTOC_technical_note1_2018.pdf*

Design Stage Evidence (update to Evidence 1)

- Specifications for all proposed refrigerants, fire suppression systems and maintenance gases highlighting the requirement for zero ODP and GWP of less than 1,500.

Construction Stage evidence (update to Evidence 1)

- Manufacturer's data for all purchased refrigerants, fire suppression systems and maintenance gases confirming zero ODP and GWP of less than 1,500.

Supporting Guidance (the following to be added to the list)

Strategy for phasing out all refrigerants with a GWP between 1500-2500 to be phased out before January 2030, before completion of the Design stage. Strategy to include the following:

- Inventory and Policy Setup, including a list of existing refrigerants in the project
- Refrigerant Alternative Planning, a plan to be developed by the project team describing their intention of replacing the refrigerants with acceptable ones
- Implementation
- Compliance letter, from the owner for phasing out

30. **(Ozone Impact credits for Mostadam "Commercial E-07 and Residential E-06" Buildings O+E) :**

Requirements (Update to Req. 1)

All refrigerants, fire suppression systems, and maintenance gases installed and used within the project boundary have an ODP of zero and a GWP of less than 1,500.

All existing projects with refrigerants of GWP between 1500-2500 to be phased out prior to January 2030, before completion of the Design stage.

Evidence (update to evidence no.1)

Manufacturer's data for all purchased refrigerants, fire suppression systems and maintenance gases confirming zero ODP and GWP of less than 1,500.

Supporting Guidance (the following to be added to the list)

Strategy for phasing out all refrigerants with a GWP between 1500-2500 to be phased out before January 2030 for existing projects. Strategy to include the following:

- Inventory and Policy Setup, including a list of existing refrigerants in the project
- Refrigerant Alternative Planning, a plan to be developed by the project team describing their intention of replacing the refrigerants with acceptable ones
- Implementation
- Compliance letter, from the owner for phasing out

as per Updated Tables E-07.1 and Table E-07.2 in (Item No. 29 above)

Mostadam - ADDENDUM

COMMERCIAL D+C

Commercial (D+C)

1) **(HC-01 Outdoor Thermal Comfort) Requirement No. 2:** project team need to provide the logic for calculation once the shading analysis is conducted:
   a) Courtyards and Open Public areas
      i) Courtyards: if the project contains Courtyard with shaded arcade, then the open area can be excluded from calculation.
      ii) for Public open spaces project team can exclude landscaping area or open plaza and run the calculation based on shading 50% of pathways and seating areas within the project.
   b) Pedestrian walkways, playgrounds and car and bicycle parking:
      i) Primary Pathways: Main circulation routes used frequently by occupants or visitors, such as walkways connecting entrances to lobbies, and paths from parking to access points. These should be prioritized in shading analysis.
      ii) Secondary Pathways: Less-used routes with limited functional significance, like service access, garden paths, or internal villa circulation. These may be treated flexibly and can be excluded from shading calculations where appropriate
      iii) Playgrounds: sport playgrounds can be excluded from the calculation where kids playing areas to be shaded.
      iv) If 75% of the car parking is underground project achieves requirement.
2) **(MW-04 Non-Polluting Insulation Materials) (Note: MW-04 is not a Keystone Requirements and will be adjusted in Mostadam platform)** The statement in the Supporting Guidance Only insulation material procured for onsite installation is to be considered in compliance with this credit. Insulation material that is a part of a product's composition or is assembled within electronic equipment manufactured offsite is excluded" and is no longer valid, all insulation material shall comply with the credit requirements.

3) **(MW-05 Sustainable Materials)**
   a) **Requirement No.1** (Recycled Steel)**1 point**: At least 40% of all reinforcing or stressing steel (by weight) used within the project boundary has post-consumer or preconsumer recycled content where Steel products melted by industrially approved techniques such as electric furnace or basic oxygen. Project team need to submit:
      i) Design Stage Evidence:
         (1) Calculations by weight demonstrating compliance with the minimum percentage of recycled content.
         (2) Extracts from specifications detailing the requirement of recycled content for steel.
      ii) Construction Stage Evidence:
         (1) Updated calculations by weight demonstrating compliance with the minimum percentage of recycled content.
         (2) Material technical datasheets confirming the recycled content of steel (pre-consumer or post-consumer).
         (3) Purchase orders for all reinforcing or stressing steel installed in the project.

b) **Requirement No.2** (Recycled Aggregates) 1 point
   i) (Alternative Path1) At least 6% of all aggregates used on site shall be recycled aggregates and shall be used for the applications approved by SASO and GSO (GSO 2489 and GSO 2372) and in accordance with the minimum allowed percentages indicated therein for each of the applications.
   https://www.gso.org.sa/store/standards/GSO:707853/GSO%202489:2015?lang=en
   ii) (Alternative Path 2) CSC Concrete and its supply chain. All ready mix concrete or precast concrete used within the project boundary has CSC R-module certificate with ≥1 Stars .
      (1) Evidence: CSC Concrete and its supply chain. CSC R-Module certificate: CSC star system quantifies recycled content: 1 Star = ≥10%; 2 Stars = ≥20% , 3 Stars = ≥40%, 4 Stars = ≥80%.
      (2) Reference Documents: CSC Concrete and its supply chain. www. csc.eco. See CSC R-Module V2.1, CSC V3.0 Technical Manual, E7.01–E7.07 Secondary Materials (pp. 120–124)

4) (MW-06 Life Cycle Assessment) project team no longer need to measure Human Toxicity (is Excluded) and updated Impact categories are:

- Global Warming Potential (GWP)
- Acidification Potential
- Eutrophication Potential
- Fossil Fuel Depletion
- Ozone Depletion

a) Projects targeting credit (MW-06 Life Cycle Assessment) where either Concrete item in project or its supply chain has CSC certificate at the level Gold or Platinum, provides EPDs at product/plant level and LCA ready data will be accounted for supporting Mostadam LCA inputs (upstream LCA profile)

Reference Documents: CSC – Concrete and its supply chain. www.csc.eco. See CSC V3.0 Technical Manual, E1.01–E1.04 (Life Cycle Impact & EPDs)

5) (MW-07 Space Flexibility) (Alternative Path) 1 Point, instead of Flexibility Strategies Project team can use (Design Out Waste principles) for 75% of non-structural elements (by area) where if project team achieves two of the following will account for the credit:

a) **Repurposing& Salvaging**: Implement a strategy for repurposing building materials and components from deconstructed or renovated structures such as windows, doors, false ceiling, partition boards, rubble, and so on. The plan should outline how to identify and utilize salvaged materials in new projects to minimize waste.
b) **Integration of prefabricated elements in the design:** Use prefabricated components for the building structure for a minimum of 30% of all structural elements in the project. The goal is to reduce generated on-site waste and improve construction efficiency.
c) **Standardization:** Establish minimum standards for design elements to ensure that components are standardized, allowing for bulk procurement and reducing material waste. Choose a minimum of two of the following components to standardize:
   - Openings: use a maximum of 4 sets of standard window sizes for 80% of the façade
   - structure: use standard sizes of columns and slab/beam spans for 80% of the structure

- Room dimensions use a maximum of 5 sets of room DIMENSIONS FOR 50% OF Built-Up area

d) **Durability of material:** Incorporate into the building appropriate protection measures to improve its durability and prevent damage to vulnerable internal and external parts and landscaping elements. The implemented measures should protect from high pedestrian traffic, vehicle and trolley traffic, and floods. The table Applicable Components and Weathering Effects below provides a list of the parts that need protection and the effects that should be taken into consideration.

(Refer to Appendix B for Supporting Guidance)

6) **(E-01 Energy Performance)** The following evidence documents are required.

Option 2 – Performance Option:

a) Detailed Energy Model report with a summary of inputs, outputs, and discussion of the results and methodology. This shall include the engineering checks conducted to validate the outputs of the model such as but not limited to comparison of the EFLH of each end-use, evaluation of the EUI for both proposed and baseline models, and a comparison of the heat gains (external + internal) between proposed and baseline models.

b) Lighting Power Density calculation showing room ID, name, area, space type, total connected lighting load, Proposed LPD, and Baseline LPD. The calculation shall also have a summation showing the total Building LPD in addition to the room-by-room calculations.
c) Air-side HVAC equipment schedule showing unit type, fan power, on/off coil temperature, recirculated air flow rate, and fresh air flow rate.
d) The operational profiles used in the models
e) Supporting evidence for any auxiliary systems included in the project's design and energy model such as irrigation pumps, swimming pool temperature control systems, cooking equipment, data centers, elevators…etc.
f) the Energy Model shall account for the energy consumption of each expected end-use within the building, and these shall be clearly highlighted in the report

The Energy Tool shall be filled in such a way that it provides a granular overview for the Assessor on how the model was developed (for example: avoid reporting all HVAC systems in one input field instead of separate input fields associated with the different units/systems in the model).

7) (**E-02 Energy Metering)**

a) For hotel developments, the energy sub-metering for the guest rooms can be combined on a floor level. That is, the project does not need to sub-meter each individual guest room but can instead install the sub-meters at floor level to capture the consumption of each end-use within the guest rooms as well as in the common areas through the same sub-meter. Furthermore, guestrooms sub-meter shall cover only the HVAC system.

b) Projects can utilize different technologies to achieve the required sub-metering instead of physical meters. In particular the use of digital sub-meters through BMS is encouraged.
c) It is paramount for the project team to address sub-metering starting from the concept-design phase of the project to ensure the electrical network is designed and installed appropriately and cost-effectively to allow for sub-metering installations.

8) **(TC-03 Access to Amenities)** Prayer rooms may be used instead of Mosques to satisfy requirement 1, provided that the prayer room(s) have sufficient capacity to accommodate all the expected practitioners.
9) **(PMM-02 Sustainable Procurement) (Alternative Path) The Sustainable Procurement Policy can be streamlined if projects assign either suppliers/manufacturers with CSC certificates and/or with CSC-CO2 module certificate. documentation cand be as follows for construction items within project boundary:**
   a) **CSC certifications provide supplier sustainability credentials.**
   b) **CSC-certified suppliers must maintain purchasing policies, ESG supplier assessments and Management Systems.**
   c) **suppliers with an add-on CSC CO2-module can demonstrate the use of concrete mix designs with CO2 reductions vs. a baseline."**

Mostadam - ADDENDUM

RESIDENTIAL D+C

Residential (D+C)

1) **(SS-01 Sewage, Flood and Rainwater Management) Requirement No.1 (Keystone Credit)**
   d) Residential Projects located in area covered by Sewage network: then project must connect with the sewage network.
   e) **Residential project with Sewage loads less than 5000 M^3 /Daily located in area not covered by Sewage network:** if project located within an area that is **not** provided by sewage network initial investigation shall be held upon the start of the project with local sewage network utility provider regarding status of the network nearby and provide plan to include site area with the network by the provider and requirements:
      i) letter form service provider about area sewage network status.
      ii) Tie in points drawings required during design stage and as-built drawings and dated images for construction stage.
      iii) Propose strategy regarding sewage management before completing of the network that explains how to store and transport and treat as and evidence for (Design Stage), long term contract with service provider until the date of sewage network completion and owner commitment letter for committing to the strategy.
      iv) owner commitment letter committing to link the project with the sewage network once completion of the network, and commit to execute the sewage management strategy.
   f) **Residential projects with Sewage loads exceeding 5000 M^3 /Daily located in area not covered by Sewage network:** then the project team must commit to credit requirement in after consultation with local sewage network utility provider.
2) **(HC-10 Outdoor Space)** The term Private Outdoor space refers to access and not visibility.

3) **(TC-03 Access to Amenities)** Prayer rooms may be used instead of Mosques to satisfy requirement 1, provided that the prayer room(s) have sufficient capacity to accommodate all the expected practitioners.

4) **(E-01 Energy Performance)** The following evidence documents are required.

Design stage:

a) Detailed EM report with a summary of inputs, outputs, and discussion of the results and methodology. This shall include the engineering checks conducted to validate the outputs of the model such as but not limited to comparison of the EFLH of each end-use, evaluation of the EUI for both proposed and baseline models, and a comparison of the heat gains (external + internal) between proposed and baseline models.

b) Lighting Power Density calculation showing room ID, name, area, space type, total connected lighting load, Proposed LPD, and Baseline LPD. The calculation shall also have a summation showing the total Building LPD in addition to the room-by-room calculations.
c) Air-side HVAC equipment schedule showing unit type, fan power, on/off coil temperature, recirculated air flow rate, and fresh air flow rate.
d) The operational profiles used in the models
e) Supporting evidence for any auxiliary systems included in the project's design and energy model such as irrigation pumps, swimming pool temperature control systems, cooking equipment, data centers, elevators…etc.
f) the EM shall account for the energy consumption of each expected end-use within the building, and these shall be clearly highlighted in the report

The Energy Tool shall be filled in such a way that it provides a granular overview for the Assessor on how the model was developed (for example: avoid reporting all HVAC systems in one input field instead of separate input fields associated with the different units/systems in the model).

5) **E-04 Energy Metering**
   a) For multi-residential buildings, the project team shall only provide sub-metering for the common areas, and a single main meter for each apartment (1 electric, and 1 BTU in the case of CHW systems).
   b) Projects can utilize different technologies to achieve the required sub-metering instead of physical meters. In particular the use of digital sub-meters through BMS is encouraged.
   c) It is paramount for the project team to address sub-metering starting from the concept-design phase of the project to ensure the electrical network is designed and installed appropriately and cost-effectively to allow for sub-metering installations.
6) **MW-03 Recycled Materials:** Requirement No.1 (Recycled Steel)**1 point**: At least 40% of all reinforcing or stressing steel (by weight) used within the project boundary has post-consumer or preconsumer recycled content where Steel products melted by industrially approved techniques such as electric furnace or basic oxygen. Project team need to submit:
   i) Design Stage Evidence:
      (1) Calculations by weight demonstrating compliance with the minimum percentage of recycled content.
      (2) Extracts from specifications detailing the requirement of recycled content for steel.
   ii) Construction Stage Evidence:
      (1) Updated calculations by weight demonstrating compliance with the minimum percentage of recycled content.
      (2) Material technical datasheets confirming the recycled content of steel (pre-consumer or post-consumer).
      (3) Purchase orders for all reinforcing or stressing steel installed in the project.
7) **MW-03 Recycled Materials:** Requirement No.2 (Recycled Aggregates) 1 point :
   a) **(Alternative Path1)** At least 6% of all aggregates used on site shall be recycled aggregates and shall be used for the applications approved by SASO and GSO (GSO 2489 and GSO

2372) and in accordance with the minimum allowed percentages indicated therein for each of the applications.
https://www.gso.org.sa/store/standards/GSO:707853/GSO%202489:2015?lang=en

b) (Alternative Path 2) CSC Concrete and its supply chain. All ready mix concrete or precast concrete used within the project boundary has CSC R-module certificate with ≥1 Stars.

i) Evidence: CSC Concrete and its supply chain. CSC R-Module certificate: CSC star system quantifies recycled content: 1 Star = ≥10%; 2 Stars = ≥20% , 3 Stars = ≥40%, 4 Stars = ≥80%.

ii) Reference Documents: CSC Concrete and its supply chain. www. csc.eco. See CSC R-Module V2.1, CSC V3.0 Technical Manual, E7.01-E7.07 Secondary Materials (pp. 120-124)

8) EI-02 Innovation: (Option No. 2 : Alternative Path) Design Out Waste principles The design must meet at least 2 out of the below 5 Design Out Waste requirements:

a) Repurposing & Salvaging: Implement a strategy for repurposing building materials and components from deconstructed or renovated structures such as windows, doors, false ceiling, partition boards, rubble, and so on. The plan should outline how to identify and utilize salvaged materials in new projects to minimize waste.

b) Design for Flexibility: 75% of non-structural elements (by area) of the building have any two of the following design flexibility strategies:

- Demountable walls or moving partitions
- Modular or unfinished flooring and false ceiling
- HVAC, Electrical and Plumbing systems have the capability to adapt spaces flexibility with minimal level of change.

c) Integration of prefabricated elements in the design: Use prefabricated components for the building structure for a minimum of 30% of all structural elements in the project. The goal is to reduce generated on-site waste and improve construction efficiency.

d) Standardization: Establish minimum standards for design elements to ensure that components are standardized, allowing for bulk procurement and reducing material waste. Choose a minimum of two of the following components to standardize:

- Openings: use a maximum of 4 sets of standard window sizes for 80% of the façade
- Structure: use standard sizes of columns and slab/beam spans for 80% of the structure
- Room dimensions use a maximum of 5 sets of room dimensions for 50% of the Built-Up area

e) Durability of material: Incorporate into the building appropriate protection measures to improve its durability and prevent damage to vulnerable internal and external parts and landscaping elements. The implemented measures should protect from high pedestrian traffic, vehicle and trolley traffic, and floods. The table Applicable Components and

Weathering Effects below provides a list of the parts that need protection and the effects that should be taken into consideration.

(Refer to Appendix B for supporting guidance)

10) **(PMM-02 Sustainable Procurement)** (Alternative Path) The Sustainable Procurement Policy can be streamlined if projects assign either suppliers/manufacturers with CSC certificates and/or with CSC-CO2 module certificate. documentation cand be as follows for construction items within project boundary :

a) CSC certifications provide supplier sustainability credentials.
b) CSC-certified suppliers must maintain purchasing policies, ESG supplier assessments and Management Systems.
c) suppliers with an add-on CSC CO2-module can demonstrate the use of concrete mix designs with CO2 reductions vs. a baseline."

Mostadam - ADDENDUM

COMMUNITIES D+C

Communities (D+C)

1. **(SA-07 Sustainable Materials)**
    a. **Requirment No.1 (Recycled Aggregates)** 1 point
        i. (Alternative Path 1) At least 6% of all aggregates used on site shall be recycled aggregates and shall be used for the applications approved by SASO and GSO (GSO 2489 and GSO 2372) and in accordance with the minimum allowed percentages indicated therein for each of the applications. https://www.gso.org.sa/store/standards/GSO:707853/GSO%202489:2015?lang=en
        ii. (Alternative Path 2) CSC Concrete and its supply chain. All ready mix concrete or precast concrete used within the project boundary has CSC R-module certificate with ≥1 Stars:
            1. Evidence: CSC Concrete and its supply chain. CSC R-Module certificate: CSC star system quantifies recycled content: 1 Star = ≥10%; 2 Stars = ≥20% , 3 Stars = ≥40%, 4 Stars = ≥80%.
            2. Reference Documents: CSC Concrete and its supply chain. www.csc.eco.

    b. **Requirement No.3 (Other Materials)** (Steel): any steel products melted by either electric furnace technology or basic oxygen, my be account for credit requirement once project team target this requirement.
2. **(E-03 Energy Efficient System)** The project can demonstrate compliance with requirements 1 and 2 by either meeting the sustainability specifications stipulated in the standard or demonstrating a clear intention of the project's design to avoid the need for lifts and escalators to navigate a project's topography that would otherwise have required the need for lifts or escalators. Examples of this would be the use of only ramps and stairs to access different levels of the development (for underground parking for example) or ensuring that retail malls within the community are designed horizontally in the form of up to G+1 blocks as opposed to vertical geometry. Note that if the project's topography itself dictates that there is no practical need for lifts or elevators then these requirements would not be applicable to the project and cannot be targeted.

3. **(SA-02 Stormwater Management)** Redirection of rainfall water strategies may be used in addition/instead of infiltration and retention strategies.

4. **(CC-01 Local Amenities)** If the design or tenants for amenity spaces are not yet defined in the design stage, a commitment letter from the developer to reserve the spaces for

amenities/community activity areas as required by Mostadam is sufficient for the design stage submission. During construction stage submission it is expected that a tenant has been identified.

5. **(CC-01 Local Amenities)** Prayer halls/rooms may be used instead of Mosques to satisfy requirement 1, provided that the prayer hall(s)/room(s) have sufficient capacity to accommodate all the expected practitioners within the catchment radius.

6. **(CC-02 Provision of Parking Parking)** For requirement 2, the width of the sidewalk to accommodate for special needs users shall be a minimum of 1.2 meters. No dedicated walkway is required, the pedestrian walkway itself can serve the purpose. The project's design documents shall clearly indicate the design's intent towards facilitating for special needs users. If a width other than 1.2 meters is used by the project team, it shall be referenced in an acceptable standard by local authority.

7. **(CW-01 Outdoor Comfort) Requiment No. 2: project team need to provide the logic for calculation once the shading analysis is conducted:**
   - **d) Playgrounds and Car parking:**
     - **i) Playgrounds: sprot playgrounds can be excluded form the calculation where kids playing areas to be shaded.**
     - **ii) Car Parking area: only public realm parking to be in calculations, project team can exclude building parking form calculation.**
   - **e) Community Transit Stops and bicycle parking:**
     - **i) Community transit stops (e.g. bus stops, tram stops): if Community has multiple Transit Stops and they have hierarchy scheme in term of size and capacity for commuters project team may propose the difference between**
     - **ii) Playgrounds: sprot playgrounds can be excluded form the calculation where kids playing areas to be shaded.**
     - **iii) If 75% of the car parking is underground project archives requirement.**

8. **(W-03 Recycled Water)** If the use of recycled water in water features **poses** a health risk, the project team shall demonstrate this through a water safety and risk assessment report. If satisfactory, the credit would be partially awarded for the use of recycled water in irrigation. The points awarded depend on the ratio of water demand for irrigation vs water features multiplied by the total available points (3) rounded up but do not exceed 2 points.
9. **(EI-03 Innovation)** (Option No. 2 : Alternative Path) Design Out Waste principal The design must meet at least 2 out of the below 3 Design Out Waste requirements:
   - **a) Integration of prefabricated elements in the design:** Use prefabricated components for the tiling and fencing for a minimum of 50% of all tiling and fencing elements in the project. The goal is to reduce generated on-site waste and improve construction efficiency.

AND Dry laying of pavers: Lay a minimum of 50% of all pavers for public roads and pavements without any mortar. Pavers can be placed above a compacted substrate without any mortar which eases their removal and reuse at their end-of-life stage.

b) Standardization: Establish minimum standards for design elements to ensure that components are standardized, allowing for bulk procurement and reducing material waste. Choose a minimum of two of the following components to standardize:

- Road and pathways: use a maximum of 4 sets of standard section designs of streets and pathways
- Hardscaping: use a maximum of 4 finishes for hardscaping (excluding asphalt for vehicular traffic).
- Barriers and fences: Use a maximum of 2 designs of barriers and fences in the masterplan

c) Durability of material: Incorporate into the design appropriate protection measures to improve the durability of public spaces and prevent damage to vulnerable parts and landscaping elements. The implemented measures should protect from high pedestrian traffic, vehicle and trolley traffic, and floods. The table Applicable Components and Weathering Effects below provides a list of the parts that need protection and the effects that should be taken into consideration.

(Refer to Appendix B for supporting guidance

10. **(MO-05 Sustainable Procurement)**) (Alternative Path) The Sustainable Procurement Policy can be streamlined if projects assign either suppliers/manufacturers with CSC certificates and/or with CSC-CO2 module certificate. documentation cand be as follows for construction items within project boundary :
    a. CSC certifications provide supplier sustainability credentials.
    b. CSC-certified suppliers must maintain purchasing policies, ESG supplier assessments and Management Systems.
    c. suppliers with an add-on CSC CO2-module can demonstrate the use of concrete mix designs with CO2 reductions vs. a baseline."

Appendix A

Mode Score and **Active Socre** topics intersection with mostadam credits Requirements

ActiveScore & ModeScore Alignments with Mostadam

06.08.24

This document outlines the number of Mostadam alignments across the ActiveScore and ModeScore. The below tables summarise the alignment but detailed information can be found in the relevant certification tab.

ACTIVESCORE

ActiveScore aligns with 28 Mostadam credits over the 6 manuals listed below.

Mostadam Manual	Credit Categories	Credit
Mostadam Commercial D+C	Transport and Connectivity	TC-04
	Health and Comfort	HC-04
	Health and Comfort	HC-08
	Health and Comfort	HC-13
	Education and Innovation	EI-03
Mostadam for Residential Buildings O+E	Transport and Connectivity	TC-01
	Transport and Connectivity	TC-04
	Education and Innovation	EI-02
	Education and Innovation	EI-04
	Health and Comfort	HC-09
Mostadam Commercial O+E	Transport and Connectivity	TC-03
	Health and Comfort	HC-09
	Health and Comfort	HC-10
	Health and Comfort	HC-12
	Education and Innovation	EI-02
	Education and Innovation	EI-04
Mostadam for Residential Buildings D+C	Transport and Connectivity	TC-05
	Health and Comfort	HC-05
	Education and Innovation	EI-02
Mostadam for Communities D+C	Community Connectivity	CC-02
	Community Wellbeing	CW-04
	Education and Innovation	EI-01
	Education and Innovation	EI-02
	Education and Innovation	EI-03
Mostadam for Communities O+E	Community Connectivity	CC-04
	Education and Innovation	EI-01
	Education and Innovation	EI-03
	Education and Innovation	EI-04

Commercial D+C Credit Alignments	5	9%
Residential Buildings O+E Credit Alignments	5	14%
Commercial O+E Credit Alignments	6	13%
Residential Buildings D+C Credit Alignments	3	7%
Communities D+C Credit Alignments	5	13%
Communities O+E Credit Alignments	4	14%
Total Alignments Across All Manuals	28	11%

MODESCORE

ModeScore aligns with 53 Mostadam credits over the 6 manuals listed below.

Mostadam Manual	Credit Categories	Credit
Mostadam Commercial D+C	Transport and Connectivity	TC-01
	Transport and Connectivity	TC-02
	Transport and Connectivity	TC-04
	Transport and Connectivity	TC-05
	Health and Comfort	HC-01
	Health and Comfort	HC-04
	Health and Comfort	HC-08
	Health and Comfort	HC-12
	Health and Comfort	HC-13
	Education and Innovation	EI-03
Mostadam for Residential Buildings O+E	Transport and Connectivity	TC-01
	Transport and Connectivity	TC-03
	Transport and Connectivity	TC-04
	Education and Innovation	EI-02
	Education and Innovation	EI-04
	Health and Comfort	HC-01
	Health and Comfort	HC-09
Mostadam Commercial O+E	Transport and Connectivity	TC-01
	Transport and Connectivity	TC-02
	Transport and Connectivity	TC-03
	Transport and Connectivity	TC-04
	Health and Comfort	HC-01
	Health and Comfort	HC-09
	Health and Comfort	HC-10
	Health and Comfort	HC-12
	Education and Innovation	EI-02
	Education and Innovation	EI-04
Mostadam for Residential Buildings D+C	Transport and Connectivity	TC-01
	Transport and Connectivity	TC-02
	Transport and Connectivity	TC-05
	Health and Comfort	HC-01
	Health and Comfort	HC-05
	Education and Innovation	EI-02
Mostadam for Communities D+C	Community Connectivity	CC-02
	Community Connectivity	CC-03
	Community Connectivity	CC-04
	Community Connectivity	CC-05
	Community Wellbeing	CW-01
	Community Wellbeing	CW-02
	Community Wellbeing	CW-04
	Education and Innovation	EI-01
	Education and Innovation	EI-02
	Education and Innovation	EI-03
	Energy	E-02
Mostadam for Communities O+E	Community Connectivity	CC-01
	Community Connectivity	CC-02
	Community Connectivity	CC-03
	Community Connectivity	CC-04
	Education and Innovation	EI-01
	Education and Innovation	EI-03
	Education and Innovation	EI-04
	Community Wellbeing	CW-01
	Community Wellbeing	CW-02

Commercial D+C Credit Alignments	10	18%
Residential Buildings O+E Credit Alignments	7	19%
Commercial O+E Credit Alignments	10	22%
Residential Buildings D+C Credit Alignments	6	14%
Communities D+C Credit Alignments	11	28%
Communities O+E Credit Alignments	9	31%
Total Alignments Across All Manuals	53	21%

ActiveScore-Mostadam Alignment for:

Mostadam Commercial D+C

(2019 Manual)

				ActiveScore Alignment Overview
Credit	**Requirements**	**Points Available**	**Applicability to Building Use**	**Topic**
TC-04 Individual Sustainable Transport	**Requirement #1** **Long-term individual sustainable transport parking spaces** For every 20 building occupants: - Install one permanent fully-shaded bicycle rack within 30 meters of a building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. **Short-term individual sustainable transport parking spaces** In addition, for every 500m² of Gross Floor Area (GFA): - Install one permanent fully-shaded bicycle rack within 30 meters of the main building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. - Shading of bicycle racks must be compliant with minimum SRI requirements in accordance with credit SS-05 Heat Island Effect.	1	- Educational Institutions (Core & Shell, Fit Out, and Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses** (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques	Topic 1: Location of occupant active travel parking Topic 2: Location of visitor bicycle parking Topic 3: Proportion of bicycle parking to local standard Topic 4: Proportion of bicycle parking to ActiveScore standard Topic 9: Lockers Topic 10: Showers
	Requirement #2 - The building must be located within 180 meters actual bicycling distance of a bicycle network that connects directly to five amenities within 5,000 meters. - Planned bicycle networks may qualify if they are fully planned, funded, and expected to be operational within 3 years of building occupancy.			
	Requirement #3 In addition to Requirements #1 and #2, provide the following at a favorable location on site: - One shower and changing room per gender for every 100 building occupants. - One clothes locker for each long-term individual sustainable transport parking space provided.	1		
HC-04 Water Quality	**Requirement #2** Provision of Drinking Water - Provide building occupants with access to mains supplied drinking water that incorporates filtration systems to maintain water quality and is supplied at both mains and chilled temperatures. The building should have a minimum of one water fountain per floor. - Develop and implement maintenance procedure for installed drinking fountains.	1	- Educational Institutions (Core & Shell, Fit Out, and Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses* (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques* (Full-Scope) - Healthcare** (Core & Shell, Fit Out, and Full-Scope) *Requirement #2 awards 2 points to Warehouses and Mosque typologies for all applicable scopes. **Requirement #2 awards 2 points to Healthcare typology for fit-out scope.	Topic 11: Changing and amenities
	Requirement #1 Visual Comfort - 100% of luminaires used (excluding emergency lights) have a minimum Color Rending Index (CRI) of 80. - 100% of luminaires used in regularly occupied spaces are shielded to limit glare (see Supporting Guidance for more information). - 100% of luminaires more than 53° above the center of view or degrees above horizontal have a luminance less than or equal to 8,000 cd/m².	1	- Educational Institutions (Core & Shell, Fit Out, and	

HC-08 Indoor Lighting	**Requirement #2** Choice of Lighting Solutions - 100% of artificial lighting needs shall be met using fluorescent lighting which incorporates high frequency electronic ballasts. - 100% of wayfinding signage shall be illuminated using LED lighting. Lighting Controls - 100% of open plan spaces, hallways and corridors have occupancy sensors that control lighting upon detecting the presence of people. - 100% of rooms intended for individual occupancy, conference rooms and meeting rooms have automated lighting controls. - 100% of conference rooms, meeting rooms and spaces of similar purpose shall be equipped with occupancy sensors. Note: For Offices and Educational Institutions, all lighting controls shall be equipped with occupancy sensors unless there is a reason associated to occupant safety that prevents this.	1	Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Core & Shell, Fit Out, and Full-Scope)	Topic 7: Security and Lighting

HC-13 Access for All	**Requirement #1** The design of the building complies with the requirements listed in Supporting Guidance: Universal or inclusive design aims to provide accessible facilities for people of all abilities. It is important to identify and acknowledge barriers to inclusion as early as possible in the design process so that thoughtful design can overcome them. While the needs of the elderly, wheelchair users and mobility impaired people are important, it is also necessary to understand the barriers experienced by people with learning difficulties, mental ill health, visual impairments and hearing impairments. Criteria outlined in The Lifetime Homes standard must be referenced by Project teams for hospitality and healthcare projects specifically. All other building typologies must follow guidelines for universal design as per ADA Standards for Accessible Design including but not limited to the following criteria. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls 17. Signage and wayfinding	1	- Educational Institutions (Core & Shell and Full-Scope) - Offices/Commercial/Government (Core & Shell and Full-Scope) - Retail/Restaurants (Core & Shell and Full-Scope) - Hospitality (Core & Shell and Full- Scope) - Mosques** (Full-Scope) - Healthcare (Core & Shell and Full- Scope) *Requirement #1 awards 2 points to all building typologies at core and shell scope. **Requirement #1 awards 2 points to Mosques typology.	Topic 5: Variety Topic 6: Access, Routes, and Wayfinding Topic 10: Showers Topic 11: Changing and amenities
EI-03 Innovation	**Requirement #1** - Option 1: Surpass the requirements of an eligible Mostadam credit. - Option 2: Adopt an innovative design or construction solution that improves the durability or flexibility of the building or reduces maintenance requirements.	2	- Educational Institutions (Shell Only, Core & Shell, Fit Out, and Full Scope) - Offices/Commercial/Government (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Retail/Restaurants (Shell Only, Core & Shell, Fit Out, and Full- Scope) - Warehouses (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Hospitality (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Shell Only, Core & Shell, Fit Out, and Full-Scope)	Topic 18: Performance and Innovation

ActiveScore-Mostadam Alignment for:

! ostadam for Residential Buildings O+E

(2019 Manual)

TC-01 Travel Plan	**Requirement #1** A Transportation Assessment is undertaken to determine the available public transport options. Based on the findings of the Assessment, a Travel Plan is developed and implemented to reduce single-occupancy vehicle trips. The Transportation Assessment must include the following as a minimum: - Description of the existing transportation options for residents, including nearby bicycle infrastructure and local public transit service routes and schedules. - Map of the local transportation infrastructure, including routes, stops and stations, as well as bicycle storage, bicycle ways and walkways on site. - Map of typical destinations for the residents - Consultation with residents and staff (on an entirely voluntary basis) on their various modes of transportation. - Feedback obtained and suggestions for improved transportation choices and the reduction of single-occupancy vehicle trips. The Travel Plan must be based on the Transportation Assessment and any feedback gained from residents and staff and include the following: - A summary of the Transportation Assessment results. - Solutions for increasing the use of alternatives to personal vehicles (especially single- occupancy vehicle trips) based on consideration of the following: o Available mode choices (e.g. public transit, bicycle/individual sustainable transport, carpool, taxi or walking) and the approximate distances of the following trips: i. Primary daily commute (two-ways). ii. Grocery or food shopping trips. iii. Regular weekend trips (e.g. Friday prayer, public parks). iv. Other routine daily or weekly trips to amenities (e.g. mosque, school pick-up/drop-off, gym). Information Pack for residents including: - Transportation and amenity maps (refer to Figure TC-01.1 for an example). - Recommendations and/or solutions introduced by the building Owner/Facility Manager to promote alternatives to personal vehicle use. - Description of the positive impacts that will result from the Travel Plan's implementation to encourage residents to adopt the Travel Plan. The Travel Plan, including the Information Pack, must be updated at least once per year to capture any changes to public transit and amenities. The Information Pack must be communicated to residents at least once per year.	1	Individual dwelling Multi-residential	Topic 18: Performance and Innovation
TC-04 Individual Sustainable Transport	**Requirement #1** Individual Dwelling One fully shaded parking area is reserved for a bicycle or other individual transportation mode. Multi-Residential Building For every 20 residents: - There is one permanent, fully shaded bicycle rack within 30 meters of a building entrance. - There is a reserved parking area for other individual transportation modes. Information is provided in the lobby/reception of the building on the benefits of individual transportation modes.	1	Individual dwelling (requirement #1 only) Multi-residential (requirement #2 only)	Topic 1: Location of occupant active travel parking Topic 2: Location of visitor bicycle parking Topic 3: Proportion of bicycle parking to local standard Topic 4: Proportion of bicycle parking to ActiveScore standard Topic 16: Information and Communication
	Requirement #2 The building is located within 180m actual bicycling distance of a bicycle network that connects directly to five amenities within 5km. Bicycle networks currently under construction may qualify if they are expected to be operational within one year.			
EI-02 Occupant Engagement	**Requirement #1** An Occupant Satisfaction Survey is conducted at least twice per year to determine the perceived level of occupant comfort and level of satisfaction in relation to the internal environment. If more than 20% of occupants are dissatisfied with an element, changes are implemented to improve occupant satisfaction.	1	Individual dwelling (requirement #1 only) Multi-residential (requirement #2 only)	Topic 18: Performance and Innovation
	Requirement #2 Regular meetings are scheduled between the Owner/Facility Manager and the occupants to discuss building-related issues including occupant health, wellbeing and environmental impacts. A mechanism is in place to address any reported issues and feedback the results to the building occupants.	1		

EI-04 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative operational solution is adopted that improves the durability or reduces the maintenance requirements of the building.	2	Individual dwelling Multi-residential	Topic 18: Performance and Innovation

HC-09 Access for All	**Requirement #1** The building complies with the requirements of the Lifetime Homes standard. The 16 criteria of the Lifetime Homes standard are listed below. Refer to the Lifetime Homes Design Guide and the website for full, detailed requirements and latest updates. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls	2	Individual dwelling Multi-residential	Topic 5: Variety Topic 6: Access, Routes, and Wayfinding Topic 10: Showers Topic 11: Changing and amenities

ActiveScore-Mostadam Alignment for:

Mostadam Commercial O+E

(2019 Manual)

TC-03 Individual Sustainable Transport	**Requirement #1** **Long-term individual sustainable transport parking spaces** For every 20 building occupants: - Install one permanent fully-shaded bicycle rack within 30 meters of a building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. **Short-term individual sustainable transport parking spaces** In addition, for every 500m² of Gross Floor Area (GFA): - Install one permanent fully-shaded bicycle rack within 30 meters of the main building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. Shading of bicycle racks must be compliant with minimum SRI requirements in accordance with credit SS-02 Heat Island Effect. **Requirement #2** The building must be located within 180 meters actual bicycling distance of a bicycle network that connects directly to five amenities within 5,000 meters. Planned bicycle networks may qualify if they are fully planned, funded, and expected to be operational within 1 year.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	Topic 1: Location of occupant active travel parking Topic 2: Location of visitor bicycle parking Topic 3: Proportion of bicycle parking to local standard Topic 4: Proportion of bicycle parking to ActiveScore standard
HC-09 Access for All	**Requirement #1** The building complies with the requirements listed in Supporting Guidance, OR - Prepare an Alternative Compliance Report for buildings that are unable to comply with this requirement. Refer to Supporting Guidance for details. All other building typologies must follow building-specific requirements for universal design as per Universal Accessibility- Built Environment Guidelines for the Kingdom of Saudi Arabia or ADA Standards for Accessible Design, whichever is more stringent, including but not limited to the following criteria. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handling heights 16. Location of service controls 17. Signage and wayfinding	2 interiors 1 full-scope	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	Topic 5: Variety Topic 6: Access, Routes, and Wayfinding Topic 10: Showers Topic 11: Changing and amenities
HC-10 Water Quality	**Requirement #2** Provide building occupants with access to mains supplied drinking water that incorporates filtration systems to maintain water quality and is supplied at both mains and chilled temperatures. The building should have a minimum of one water fountain per floor. Refer to Supporting Guidance for maintenance requirements.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	Topic 11: Changing and amenities
	Requirement #1 Develop and implement an Activity Program or Fitness Campaign to engage occupants in regular physical activity and promote awareness. Refer to Supporting Guidance for details.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Governm	

HC-12 Physical Activity	**Requirement #2** Provide optimum space for physical activity indoors or outdoors and equipment, free of charge.	1	ent (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Healthcare (Interiors and Full- Scope)	Topic 17: Community Building Topic 18: Performance and Innovation

EI-02 Occupant and Visitors Engagement	**Requirement #1** Develop and implement the Occupant Engagement Procedure. Conduct an Occupant and Visitors Satisfaction Survey at least twice per year to determine the perceived level of occupant comfort and level of satisfaction in relation to the internal environment. If more than 20% of occupants and Visitors are dissatisfied with an element, implement changes to improve occupant satisfaction. Mosques Only In lieu of conducting an Occupant and Visitors Survey, Mosque projects are required to provide digital or manual feedback systems that can be used to report any problems/issues. The Facility Management (FM) team will respond to these reported problems/issues and undertake remediation where applicable. **Requirement #2** Regular meetings are scheduled between the Owner/Facility Manager and the occupants to discuss building-related issues including occupant health, wellbeing and environmental impacts. A mechanism is in place to address any reported issues and feedback the results to the building occupants. Mosques only In lieu of Feedback Meetings, there is a mechanism in place to address the reported problems/issues.	2	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	Topic 18: Performance and Innovation
EI-04 Innovation	**Requirement #1** Option 1: Surpass the requirements of an eligible Mostadam credit. Option 2: Adopt an innovative solution that improves the durability or flexibility of the building or reduces maintenance requirements.	2	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	Topic 18: Performance and Innovation

ActiveScore-Mostadam Alignment for:

! ostadam for Residential Buildings D+C

(2019 Manual)

TC-05 Individual Sustainable Transport	**Requirement #1** Individual dwelling: One fully shaded parking area is reserved for a bicycle or other individual transportation mode. Multi-residential building: For every 20 residents: - One permanent fully shaded bicycle rack is installed within 30m of a building entrance. - One parking area is reserved for other individual transportation modes.	1	Individual dwelling Multi-residential	Topic 1: Location of occupant active travel parking Topic 3: Proportion of bicycle parking to local standard Topic 4: Proportion of bicycle parking to ActiveScore standard
	Requirement #2 The building is located within 180m actual bicycling distance of a bicycle network that connects directly to five amenities within 5km. Planned bicycle networks may qualify if they are already fully planned, funded, and expected to be operational within 3 years of building occupancy.	1		
HC-05 Access for All	**Requirement #1** The design of the building complies with the requirements of the Lifetime Homes standard The 16 criteria of the Lifetime Homes standard are listed below. Refer to the website for the full, detailed requirements and latest updates (http://www.lifetimehomes.org.uk/). Project teams may also wish to reference the Lifetime Homes Design Guide. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls	1	Individual dwelling Multi-residential	Topic 5: Variety Topic 6: Access, Routes, and Wayfinding Topic 10: Showers Topic 11: Changing and amenities
EI-02 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative design or construction solution is adopted that improves the durability or flexibility of the building or reduces maintenance requirements.	2	Individual dwelling Multi-residential	Topic 18: Performance and Innovation

ActiveScore-Mostadam

Alignmentfor: ! ostadam for Communities D+C (2019 Manual)

CC-02 Provision of Parking	**Requirement #2** Parking structures have a pedestrian-friendly interface with the public realm, including: - Sidewalks along all adjacent roads, which take into consideration the corridor width requirements for individuals with special needs. - Clearly marked crosswalks and signage at each vehicle entrance/exit. - A visually interesting façade at ground level. On-street parking is buffered from bicycle lanes as per CC-02 Bicycle Network.	1	Communities Only	Topic 6: Access, Routes, and Wayfinding
CW-04 Access for All	**Requirement #1** An Accessibility Strategy is developed and implemented for the project. There is a level, accessible pedestrian crossing at every street intersection and every 100m along streets with a design speed > 40 km/h.	1	Communities Only	Topic 6: Access, Routes, and Wayfinding
	Requirement #2 A Wayfinding Strategy is developed and implemented for the project.	1		
EI-01 Sustainability Manual	**Requirement #1** A Sustainability Manual is produced for the Owners and developers of the buildings within the community.	1	Communities Only	Topic 16: Information and Communication
EI-02 Sustainability Communication	**Requirement #1** A Sustainability Communication Strategy is developed and implemented that educates residents and visitors on the sustainability achievements of the design and construction of the community.	2	Communities Only	Topic 16: Information and Communication
	Requirement #2 The Sustainability Communication Strategy is implemented using one of the following methods, or a combination of the two: - Continual Communication: Initiatives to boost residents' and visitors' awareness of the sustainability aspects of the community and encourage their participation in organized campaigns and activities. - Stationary Communication: Educate residents and visitors on the sustainable features of the community using prominent and adequate signage in public spaces.			
EI-03 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative design or construction solution is adopted that improves the durability or flexibility of the building or reduces maintenance requirements.	2	Communities Only	Topic 18: Performance and Innovation

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Alignmentfor: ! ostadam for Communities O+E (2019 Manual)

CC-04 Access for All	**Requirement #1** An Accessibility Strategy is developed and implemented for the project. There is a level, accessible pedestrian crossing at every street intersection and every 100m along streets with a design speed > 40 km/h.	2	Communities Only	Topic 6: Access, Routes, and Wayfinding
	Requirement #2 A Wayfinding Strategy is developed and implemented for the project.	1		
EI-01 Sustainability Manual	**Requirement #1** A Sustainability Manual is developed and distributed to the buildings within the community that describes the community's targeted credits and the ways in which the buildings can coordinate with and support the sustainability aspirations of the community.	2	Communities Only	Topic 16: Information and Communication
EI-03 Sustainability Communication	**Requirement #1** Sustainability Communication Strategy A Sustainability Communication Strategy is developed and implemented that educates residents and visitors on the sustainability achievements of the design, construction and operation of the community. The Sustainability Communication Strategy is implemented using one of the following methods, or a combination of the two: - Continual Communication: initiatives to boost residents' and visitors' awareness of the sustainability aspects of the community and encourage their participation in organized campaigns and activities. - Stationary Communication: educate residents and visitors on the sustainable features of the community using prominent and adequate signage in public spaces.	2	Communities Only	Topic 16: Information and Communication
	Requirement #2 Sustainability Communication Survey In addition to requirement #1, a Sustainability Communication Survey of the community's residents and visitors is conducted every year. The Sustainability Communication Strategy is reviewed and enhanced based on the residents and visitors' feedback.	1		
EI-04 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative design or construction solution is adopted that improves the durability or flexibility of the building or reduces maintenance requirements.	2	Communities Only	Topic 18: Performance and Innovation

ModeScore-Mostadam Alignment for:

Mostadam Commercial D+C

(2019 Manual)

				ModeScore Alignment Overview
Credit	**Requirements**	**Points Available**	**Applicability to Building Use**	**Topic**
TC-01 Sustainable Commuting Credit	**Requirement #1** - Option 1: Install Electric Vehicle Supply Equipment (EVSE) for at least 3% of the total parking spaces to be used by the project. The associated parking spaces must be fully shaded and reserved for the sole use of electric vehicles. OR - Option 2: At least 6% of total parking spaces within the project boundary must be Electric Vehicle (EV) ready. The associated parking spaces must be co-located in favorable positions within the parking area. Obtain a written commitment from the Owner stating that when EVSE's are installed, the appropriate signage shall be provided to indicate that those spaces are reserved for the sole use of electric vehicles.	1	- Educational Institutions (Core & Shell, Fit Out, and Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Core & Shell, Fit Out, and Full-Scope) *Requirement #1 is not applicable to all building typologies at fit-out scope. **Requirement #1 awards 2 points to Educational Institutions and Healthcare typologies at Full Scope.	PV2. Electric Parking PV7. Car sharing scheme availability
	Requirement #2 - Implement a Carpooling Strategy for both males and females to encourage users to share private vehicles, in accordance with local KSA laws. AND - 3% of the total parking spaces within the project boundary shall be reserved for the sole use of carpool vehicles. The associated parking spaces must be fully shaded.	1		
TC-02 Access to Public Transportation	**Requirement #1** - A building entrance for pedestrians is located within 200 meters of safe walking distance from an existing bus stop OR an existing metro/commuter rail station. The minimum day-time frequency for both the bus service and the metro/commuter rail service enlisting specific timing of departure and arrival at waypoints along the route must be at least 30 minutes. - Future expansion to transit services may qualify if they are planned, funded, and expected to be operational within 3 years of building occupancy.	1	- Educational Institutions (Shell Only, Core & Shell, Fit Out, and Full- Scope) - Offices/Commercial/Government (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Retail/Restaurants (Shell Only, Core & Shell, Fit Out, and Full- Scope) - Warehouses (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Hospitality (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Healthcare (Shell Only, Core & Shell, Fit Out, and Full-Scope)	PT1. Proximity PT3. Quality
	Requirement#2 - The minimum day-time frequency for both the bus service and the metro/commuter rail service enlisting specific timing of departure and arrival at waypoints along the route is more frequent than 30 minutes.	1		
TC-04 Individual Sustainable Transport	**Requirement #1** **Long-term individual sustainable transport parking spaces** For every 20 building occupants: - Install one permanent fully-shaded bicycle rack within 30 meters of a building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. **Short-term individual sustainable transport parking spaces** In addition, for every 500m² of Gross Floor Area (GFA): - Install one permanent fully-shaded bicycle rack within 30 meters of the main building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. - Shading of bicycle racks must be compliant with minimum SRI requirements in accordance with credit SS-05 Heat Island Effect.	1	- Educational Institutions* (Core & Shell, Fit Out, and Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses** (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Core & Shell, Fit Out, and Full-Scope)	AT3. Proximity of active travel routes AT9. On-site active travel facilities - ActiveScore
	Requirement #2 - The building must be located within 180 meters actual bicycling distance of a bicycle network that connects directly to five amenities within 5,000 meters. - Planned bicycle networks may qualify if they are fully planned, funded, and expected to be operational within 3 years of building occupancy.			

	Requirement #3 In addition to Requirements #1 and #2, provide the following at a favorable location on site: - One shower and changing room per gender for every 100 building occupants. - One clothes locker for each long-term individual sustainable transport parking space provided.	1	*Requirement #3 awards 2 points to Educational Institutions at full scope. **Requirement #3 awards 2 points to Warehouses typology at all applicable scopes.	
TC-05 Sustainable Operations	**Requirement #1** - 50% of the equipment and vehicles used for onsite indoor & outdoor goods and materials handling are electrical.	1	- Retail/Restaurants (Fit Out and Full-Scope) - Warehouses (Fit Out and Full- Scope)	SW1. Electric deliveries
	Requirement #2 - 100% of the equipment and vehicles used for onsite indoor & outdoor goods and materials handling are electrical.	1		

HC-01 Outdoor Thermal Comfort	**Requirement #1** Develop and implement an Outdoor Thermal Comfort Strategy that includes consideration of the following: - Prevailing wind and seasonal weather. - Building location, orientation and pedestrian connectivity. - Shading (from buildings and shade structures). - Selection of solar reflective materials. **Requirement #2** Provide a minimum of 50% shading cover to the following where they exist within the plot: - Courtyards, - Public open spaces. Provide a minimum of 75% shading cover to the following where they exist within the plot: - Pedestrian walkways, - Playgrounds, - Car and bicycle parking. Note: Requirement is not applicable to 'Shell only' projects.	1	- Educational Institutions (Shell Only, Core & Shell, and Full-Scope) - Offices/Commercial/Government (Shell Only, Core & Shell, and Full- Scope) - Retail/Restaurants (Shell Only, Core & Shell, and Full-Scope) - Warehouses (Shell Only, Core & Shell, and Full-Scope) - Hospitality (Shell Only, Core & Shell, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Shell Only, Core & Shell, and Full-Scope)	AT11. Innovation
HC-04 Water Quality	**Requirement #2** Provision of Drinking Water - Provide building occupants with access to mains supplied drinking water that incorporates filtration systems to maintain water quality and is supplied at both mains and chilled temperatures. The building should have a minimum of one water fountain per floor. - Develop and implement maintenance procedure for installed drinking fountains.	1	- Educational Institutions (Core & Shell, Fit Out, and Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses* (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques* (Full-Scope) - Healthcare** (Core & Shell, Fit Out, and Full-Scope) *Requirement #2 awards 2 points to Warehouses and Mosque typologies for all applicable scopes. **Requirement #2 awards 2 points to Healthcare typology for fit-out scope.	AT9. On-site active travel facilities - ActiveScore
HC-08 Indoor Lighting	**Requirement #1** Visual Comfort - 100% of luminaires used (excluding emergency lights) have a minimum Color Rending Index (CRI) of 80. - 100% of luminaires used in regularly occupied spaces are shielded to limit glare (see Supporting Guidance for more information). - 100% of luminaires more than 53° above the center of view or degrees above horizontal have a luminance less than or equal to 8,000 cd/m².	1	- Educational Institutions (Core & Shell, Fit Out, and Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Core & Shell, Fit Out, and Full-Scope)	AT9. On-site active travel facilities - ActiveScore
	Requirement #2 Choice of Lighting Solutions - 100% of artificial lighting needs shall be met using fluorescent lighting which incorporates high frequency electronic ballasts. - 100% of wayfinding signage shall be illuminated using LED lighting. Lighting Controls - 100% of open plan spaces, hallways and corridors have occupancy sensors that control lighting upon detecting the presence of people. - 100% of rooms intended for individual occupancy, conference rooms and meeting rooms have automated lighting controls. - 100% of conference rooms, meeting rooms and spaces of similar purpose shall be equipped with occupancy sensors. Note: For Offices and Educational Institutions, all lighting controls shall be equipped with occupancy sensors unless there is a reason associated to occupant safety that prevents this.	1		
	Requirement #1 A stairway must be an appealing option for accessing at least the first four floors of the building.	1	- Educational Institutions (Core & Shell, Fit Out, and	

HC-12 Active Lifestyle	**Requirement #2** Building occupants have convenient access to either a gym or a pool for lap swimming.	1	Full-Scope) - Offices/Commercial/Government (Core & Shell, Fit Out, and Full- Scope) - Retail/Restaurants (Core & Shell, Fit Out, and Full-Scope) - Warehouses (Core & Shell, Fit Out, and Full-Scope) - Hospitality (Core & Shell, Fit Out, and Full-Scope) - Healthcare (Core & Shell, Fit Out, and Full-Scope) *Requirement #2 is not applicable to all building typologies at fit-out scope.	AT11. Innovation

HC-13 Access for All	**Requirement #1** The design of the building complies with the requirements listed in Supporting Guidance: Universal or inclusive design aims to provide accessible facilities for people of all abilities. It is important to identify and acknowledge barriers to inclusion as early as possible in the design process so that thoughtful design can overcome them. While the needs of the elderly, wheelchair users and mobility impaired people are important, it is also necessary to understand the barriers experienced by people with learning difficulties, mental ill health, visual impairments and hearing impairments. Criteria outlined in The Lifetime Homes standard must be referenced by Project teams for hospitality and healthcare projects specifically. All other building typologies must follow guidelines for universal design as per ADA Standards for Accessible Design including but not limited to the following criteria. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls 17. Signage and wayfinding	1	- Educational Institutions (Core & Shell and Full-Scope) - Offices/Commercial/Government (Core & Shell and Full-Scope) - Retail/Restaurants (Core & Shell and Full-Scope) - Hospitality (Core & Shell and Full- Scope) - Mosques** (Full-Scope) - Healthcare (Core & Shell and Full- Scope) *Requirement #1 awards 2 points to all building typologies at core and shell scope. **Requirement #1 awards 2 points to Mosques typology.	PV3. Parking provision for users with accessibilty needs PV4. Electric parking provision for users with accessibility needs AT2. Quality AT4. Quality AT5. Accessibility - Use of the development AT6. Accessibility - Storage AT9. On-site active travel facilities - ActiveScore
EI-03 Innovation	**Requirement #1** - Option 1: Surpass the requirements of an eligible Mostadam credit. - Option 2: Adopt an innovative design or construction solution that improves the durability or flexibility of the building or reduces maintenance requirements.	2	- Educational Institutions (Shell Only, Core & Shell, Fit Out, and Full Scope) - Offices/Commercial/Government (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Retail/Restaurants (Shell Only, Core & Shell, Fit Out, and Full- Scope) - Warehouses (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Hospitality (Shell Only, Core & Shell, Fit Out, and Full-Scope) - Mosques (Full-Scope) - Healthcare (Shell Only, Core & Shell, Fit Out, and Full-Scope)	PT6. Innovation AT11. Innovation SW6. Innovation

ModeScore-Mostadam Alignment for:

Mostadam for Residential Buildings O+E

(2019 Manual)

TC-01 Travel Plan	**Requirement #1** A Transportation Assessment is undertaken to determine the available public transport options. Based on the findings of the Assessment, a Travel Plan is developed and implemented to reduce single-occupancy vehicle trips. The Transportation Assessment must include the following as a minimum: - Description of the existing transportation options for residents, including nearby bicycle infrastructure and local public transit service routes and schedules. - Map of the local transportation infrastructure, including routes, stops and stations, as well as bicycle storage, bicycle ways and walkways on site. - Map of typical destinations for the residents - Consultation with residents and staff (on an entirely voluntary basis) on their various modes of transportation. - Feedback obtained and suggestions for improved transportation choices and the reduction of single-occupancy vehicle trips. The Travel Plan must be based on the Transportation Assessment and any feedback gained from residents and staff and include the following: - A summary of the Transportation Assessment results. - Solutions for increasing the use of alternatives to personal vehicles (especially single- occupancy vehicle trips) based on consideration of the following: o Available mode choices (e.g. public transit, bicycle/individual sustainable transport, carpool, taxi or walking) and the approximate distances of the following trips: i. Primary daily commute (two-ways). ii. Grocery or food shopping trips. iii. Regular weekend trips (e.g. Friday prayer, public parks). iv. Other routine daily or weekly trips to amenities (e.g. mosque, school pick-up/drop-off, gym). Information Pack for residents including: - Transportation and amenity maps (refer to Figure TC-01.1 for an example). - Recommendations and/or solutions introduced by the building Owner/Facility Manager to promote alternatives to personal vehicle use. - Description of the positive impacts that will result from the Travel Plan's implementation to encourage residents to adopt the Travel Plan. The Travel Plan, including the Information Pack, must be updated at least once per year to capture any changes to public transit and amenities. The Information Pack must be communicated to residents at least once per year.	1	Individual dwelling Multi-residential	PT5. Information, Promotion, and Services PV10. Information, Promotion, and Services AT10. Information, Promotion, and Services SW5. Performance
TC-03 Electric Vehicle Provisions	**Requirement #1** For individual dwellings and small multi-residential buildings (≤ 3 storeys), there is a minimum of one parking space with Electric Vehicle Supply Equipment (EVSE). The EVSE parking space is fully shaded and reserved for the sole use of electric vehicles. **Requirement #2** EVSE is present for at least 3% of the total parking spaces, or at least two spaces, whichever is greater. The EVSE parking spaces are fully shaded and reserved for the sole use of electric vehicles. Information is provided in the lobby/reception of the building on the benefits of electric vehicles.	1	Individual dwelling (requirement #1 only) Multi-residential (requirement #2 only)	PV2. Electric Parking
TC-04 Individual Sustainable Transport	**Requirement #1** Individual Dwelling One fully shaded parking area is reserved for a bicycle or other individual transportation mode. Multi-Residential Building For every 20 residents: - There is one permanent, fully shaded bicycle rack within 30 meters of a building entrance. - There is a reserved parking area for other individual transportation modes. Information is provided in the lobby/reception of the building on the benefits of individual transportation modes.	1	Individual dwelling (requirement #1 only) Multi-residential (requirement	AT3. Proximity of active travel routes AT9. On-site active travel facilities - ActiveScore

	Requirement #2 The building is located within 180m actual bicycling distance of a bicycle network that connects directly to five amenities within 5km. Bicycle networks currently under construction may qualify if they are expected to be operational within one year.		#2 only)	
EI-O2 Occupant Engagement	**Requirement #1** An Occupant Satisfaction Survey is conducted at least twice per year to determine the perceived level of occupant comfort and level of satisfaction in relation to the internal environment. If more than 20% of occupants are dissatisfied with an element, changes are implemented to improve occupant satisfaction.	1	Individual dwelling (requirement #1 only) Multi-residential (requirement #2 only)	SW5. Performance
	Requirement #2 Regular meetings are scheduled between the Owner/Facility Manager and the occupants to discuss building-related issues including occupant health, wellbeing and environmental impacts. A mechanism is in place to address any reported issues and feedback the results to the building occupants.	1		

EI-04 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative operational solution is adopted that improves the durability or reduces the maintenance requirements of the building.	2	Individual dwelling Multi-residential	PT6. Innovation AT11. Innovation SW6. Innovation
HC-01 Outdoor Thermal Comfort	**Requirement #1** A minimum of 50% shading cover is provided to the following where they exist within the plot: - Front entrances, patios and courtyards - Hard-standing amenity spaces (including balconies and roof amenity spaces and excluding pedestrian walkways and playgrounds) A minimum of 75% shading cover is provided to the following where they exist within the plot: - Pedestrian walkways - Playgrounds - Car and bicycle parking	2	Individual dwelling Multi-residential	AT11. Innovation
HC-09 Access for All	**Requirement #1** The building complies with the requirements of the Lifetime Homes standard. The 16 criteria of the Lifetime Homes standard are listed below. Refer to the Lifetime Homes Design Guide and the website for full, detailed requirements and latest updates. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls	2	Individual dwelling Multi-residential	PV3. Parking provision for users with accessibilty needs PV4. Electric parking provision for users with accessibility needs AT2. Quality AT4. Quality AT5. Accessibility - Use of the development AT6. Accessibility - Storage AT9. On-site active travel facilities - ActiveScore

ModeScore-Mostadam Alignment for:

Mostadam Commercial O+E

(2019 Manual)

TC-01 Travel Plan	**Requirement #1** A Transportation Assessment is undertaken to determine the available public transportoptions. Based on the findings of the Assessment, a Commuting Strategy is developed and implemented to reduce single-occupancyvehicle	1 Point at Full Scope 2 Points at interiors	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses* (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Healthcare (Interiors and Full- Scope) Requirement #2 awards 1 point for Warehouse Interiors projects.	PT5. Information, Promotion, and Services SW5. Performance
	Requirement #2 Warehouse Interiors Projects only* In addition to requirement #1, and as a part of the Commuting Strategy, provide a shuttle/bus service, in accordance with KSA laws, for all employees to commute to and from work.	1		
TC-02 Electric Vehicle Provisions	**Requirement #1** Electric Vehicle Supply Equipment (EVSE) is provided for at least 3% of the total parking spaces or at least 2 spaces (whichever is greater) to be used by the project. The associated parking spaces must be fully shaded and reserved for the sole use of electric vehicles.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	PV2. Electric Parking
TC-03 Individual Sustainable Transport	**Requirement #1** **Long-term individual sustainable transport parking spaces** For every 20 building occupants: - Install one permanent fully-shaded bicycle rack within 30 meters of a building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. **Short-term individual sustainable transport parking spaces** In addition, for every 500m² of Gross Floor Area (GFA): - Install one permanent fully-shaded bicycle rack within 30 meters of the main building entrance. - Reserve one parking space at a minimum, for other individual transportation modes. Shading of bicycle racks must be compliant with minimum SRI requirements in accordance with credit SS-02 Heat Island Effect.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	AT3. Proximity of active travel routes AT9. On-site active travel facilities - ActiveScore
	Requirement #2 The building must be located within 180 meters actual bicycling distance of a bicycle network that connects directly to five amenities within 5,000 meters. Planned bicycle networks may qualify if they are fully planned, funded, and expected to be operational within 1 year.			
TC-04 Sustainable Operations	**Requirement #1** 50% of the equipment and vehicles used for onsite indoor & outdoor goods and materials handling are electrical.	1	- Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope)	SW1. Electric deliveries
	Requirement #2 100% of the equipment and vehicles used for onsite indoor & outdoor goods and materials handling are electrical.			
HC-01 Outdoor Thermal Comfort	**Requirement #1** Provide a minimum of 50% shading cover to the following where they exist within the plot: - Courtyards, - Public open spaces. Provide a minimum of 75% shading cover to the following where they exist within the plot: - Pedestrian walkways, - Playgrounds, - Car and bicycle parking.	1	- Educational Institutions (Full- Scope) - Offices/Commercial/Government (Full-Scope) - Retail/Restaurants (Full-Scope) - Warehouses (Full-Scope) - Hospitality (Full-Scope) - Mosques (Full-Scope)	AT11. Innovation

			-Healthcare (Full-Scope)	

HC-09 Access for All	**Requirement #1** The building complies with the requirements listed in Supporting Guidance, OR - Prepare an Alternative Compliance Report for buildings that are unable to comply with this requirement. Refer to Supporting Guidance for details. All other building typologies must follow building-specific requirements for universal design as per Universal Accessibility- Built Environment Guidelines for the Kingdom of Saudi Arabia or ADA Standards for Accessible Design, whichever is more stringent, including but not limited to the following criteria. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handling heights 16. Location of service controls 17. Signage and wayfinding	2 interiors 1 full-scope	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	PV3. Parking provision for users with accessibilty needs PV4. Electric parking provision for users with accessibility needs AT2. Quality AT4. Quality AT5. Accessibility - Use of the development AT6. Accessibility - Storage AT9. On-site active travel facilities - ActiveScore
HC-10 Water Quality	**Requirement #2** Provide building occupants with access to mains supplied drinking water that incorporates filtration systems to maintain water quality and is supplied at both mains and chilled temperatures. The building should have a minimum of one water fountain per floor. Refer to Supporting Guidance for maintenance requirements.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	AT9. On-site active travel facilities - ActiveScore
HC-12 Physical Activity	**Requirement #1** Develop and implement an Activity Program or Fitness Campaign to engage occupants in regular physical activity and promote awareness. Refer to Supporting Guidance for details.	1	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Healthcare (Interiors and Full- Scope)	AT9. On-site active travel facilities - ActiveScore AT11. Innovation
	Requirement #2 Provide optimum space for physical activity indoors or outdoors and equipment, free of charge.	1		
EI-02 Occupant and Visitors Engagement	**Requirement #1** Develop and implement the Occupant Engagement Procedure. Conduct an Occupant and Visitors Satisfaction Survey at least twice per year to determine the perceived level of occupant comfort and level of satisfaction in relation to the internal environment. If more than 20% of occupants and Visitors are dissatisfied with an element, implement changes to improve occupant satisfaction. Mosques Only In lieu of conducting an Occupant and Visitors Survey, Mosque projects are required to provide digital or manual feedback systems that can be used to report any problems/issues. The Facility Management (FM) team will respond to these reported problems/issues and undertake remediation where applicable.	2	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Warehouses (Interiors and Full- Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	SW5. Performance
	Requirement #2 Regular meetings are scheduled between the Owner/Facility Manager and the occupants to discuss building-related issues including occupant health, wellbeing and environmental impacts. A mechanism is in place to address any reported issues and feedback the results to the building occupants. Mosques only In lieu of Feedback Meetings, there is a mechanism in place to address the reported problems/issues.			

EI-04 Innovation	**Requirement #1** Option 1: Surpass the requirements of an eligible Mostadam credit. Option 2: Adopt an innovative solution that improves the durability or flexibility of the building or reduces maintenance requirements.	2	- Educational Institutions (Interiors and Full-Scope) - Offices/Commercial/Government (Interiors and Full-Scope) - Retail/Restaurants (Interiors and Full-Scope) - Hospitality (Interiors and Full- Scope) - Mosques (Full-Scope) - Healthcare (Interiors and Full- Scope)	PT6. Innovation AT11. Innovation SW6. Innovation

ModeScore-Mostadam Alignment for:

Mostadam for Residential Buildings D+C

(2019 Manual)

TC-01 Electric Vehicle Provisions	**Requirement #1** Electric Vehicle Supply Equipment (EVSE) is installed for at least one vehicle per household.	1	Individual dwelling (requirement #1 only) Multi-residential (requirement #2 only)	PV2. Electric Parking
	Requirement #2 Electric Vehicle Supply Equipment (EVSE) is installed for at least 3% of the total parking spaces, or at least two spaces, whichever is greater. The EVSE parking spaces are fully shaded and reserved for the sole use of electric vehicles.			
TC-02 Access to Public Transportation	**Requirement#1** The building is located within the following distances of a bus stop or a metro/commuter rail station. The minimum day-time service frequency of the bus stop and the station must be at least 30 minutes. - Individual dwelling: 350 meters safe walking distance of a bus stop OR 700m safe walking distance of a metro/commuter rail station. - Multi-residential building: 350m safe walking distance of a bus stop OR metro/commuter rail station. Future expansions to transit service may qualify if they are already planned, funded, and expected to be operational within 3 years of building occupancy.	1	Individual dwelling Multi-residential	PT1. Proximity PT3. Quality
	Requirement #2 In addition to requirement #1, the day-time service of the bus stop or the metro/commuter rail station is more frequent than 30 minutes.	1		
TC-05 Individual Sustainable Transport	**Requirement #1** Individual dwelling: One fully shaded parking area is reserved for a bicycle or other individual transportation mode. Multi-residential building: For every 20 residents: - One permanent fully shaded bicycle rack is installed within 30m of a building entrance. - One parking area is reserved for other individual transportation modes.	1	Individual dwelling Multi-residential	AT3. Proximity of active travel routes AT9. On-site active travel facilities - ActiveScore
	Requirement #2 The building is located within 180m actual bicycling distance of a bicycle network that connects directly to five amenities within 5km. Planned bicycle networks may qualify if they are already fully planned, funded, and expected to be operational within 3 years of building occupancy.	1		
HC-01 Outdoor Thermal Comfort	**Requirement #1** An Outdoor Thermal Comfort Strategy is developed and implemented that includes consideration of the following: - Prevailing wind and seasonal weather - Building location, orientation and pedestrian connectivity - Shading (from buildings and shade structures) - Selection of solar reflective materials	1	Individual dwelling (requirement #1 and #3 only) Multi-residential (requirement #2 and #3 only)	AT11. Innovation
	Requirement #2 A minimum of 50% shading cover is provided to the following where they exist within the plot: - Front entrances, patios and courtyards - Hard-standing amenity spaces (including balconies and roof amenity spaces)	1		
	Requirement #3 A minimum of 75% shading cover is provided to the following where they exist within the plot: - Pedestrian walkways - Playgrounds - Car and bicycle parking	1		

HC-05 Access for All	**Requirement #1** The design of the building complies with the requirements of the Lifetime Homes standard The 16 criteria of the Lifetime Homes standard are listed below. Refer to the website for the full, detailed requirements and latest updates (http://www.lifetimehomes.org.uk/). Project teams may also wish to reference the Lifetime Homes Design Guide. 1. Parking (width or widening capability) 2. Approach to dwelling from parking (distance, gradients and widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation Space 8. Entrance level living space 9. Potential for entrance level bed-space 10. Entrance level WC and shower drainage 11. WC and bathroom walls 12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom / bathroom 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls	1	Individual dwelling Multi-residential	PV3. Parking provision for users with accessibilty needs PV4. Electric parking provision for users with accessibility needs AT2. Quality AT4. Quality AT5. Accessibility - Use of the development AT6. Accessibility - Storage AT9. On-site active travel facilities - ActiveScore
EI-02 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative design or construction solution is adopted that improves the durability or flexibility of the building or reduces maintenance requirements.	2	Individual dwelling Multi-residential	PT6. Innovation AT11. Innovation SW6. Innovation

ModeScore-Mostadam Alignment

for: Mostadam for Communities

D+C (2019 Manual)

CC-02 Provision of Parking	**Requirement #1** A Parking Demand Analysis and Management Strategy is prepared for the project.	1	Communities Only	PV2. Electric Parking PV5. Security and Lighting PV6. Management AT5. Accessibility - Use of the development
	Requirement #2 Parking structures have a pedestrian-friendly interface with the public realm, including: - Sidewalks along all adjacent roads, which take into consideration the corridor width requirements for individuals with special needs. - Clearly marked crosswalks and signage at each vehicle entrance/exit. - A visually interesting façade at ground level. On-street parking is buffered from bicycle lanes as per CC-02 Bicycle Network.	1		
	Requirement #3 A Curb Management Strategy is implemented for the project. Electric Vehicle Supply Equipment (EVSE) is provided for 2% of all public realm parking spaces, or at least two spaces, whichever is greater.	1		
CC-03 Walkable Public Realm	**Requirement #1** A safe, accessible and continuous pedestrian network connects each building to nearby amenities and transit stops. The pedestrian network complies with one of the following: - A Connectivity Index of 1.4 or greater. - An Intersection Density of at least 54 per km2.	2	Communities Only	PT3. Quality AT2. Quality
	Requirement #2 In addition to requirement #1, the pedestrian network is designed to achieve at least two of the following: - Street trees or landscaping run adjacent to pedestrian walkways on residential blocks. - Continuous walkways are provided on both sides of the roads for at least 85% of the pedestrian network. - Building plots along non-residential and mixed-use blocks have pedestrian entrances every 50m or less. - Pedestrians can access public buildings without walking through a surface parking lot. - Garages and service bay openings face less than 20% of the network length (excluding roadways).	1		
CC-04 Bicycle Network	**Requirement #1** The community's bicycle network complies with the following requirements: - 75% of buildings are located within 180m bicycling distance of the bicycle network that connects directly to five amenities within 5km. - Bicycle lanes in the network are clearly marked as being only for bicycles or other individual transportation vehicles and are at least 1.5m wide (or 3m wide for two-way lanes). - Shaded rest areas for cyclists are provided every 1500m. - Shaded and secure parking racks for bicycles and other individual transportation vehicles are provided at key destinations in the public realm. Future expansions to bicycle networks may qualify if they are already planned, funded, and expected to be operational within 3 years.	2	Communities Only	AT1. Proximity of pedestrian and wheeling route AT2. Quality AT3. Proximity of active travel routes AT4. Quality
	Requirement #2 In addition to requirement #1, the bicycle network is physically separated from both vehicular and pedestrian traffic on all roads that have a design speed > 40km/h or more than two lanes of traffic in the same direction.	1		
CC-05 Public Transportation	**Requirement#1** Each building is located within the following distances of a bus stop or a metro/commuter rail station. The minimum day-time service frequency of the bus stop and the station must be at least 30 minutes. - Individual dwelling: EITHER 350 meters safe walking distance of a bus stop OR 700m safe walking distance of a metro/commuter rail station. - Multi-residential building: 350m safe walking distance of a bus stop OR metro/commuter rail station. - Commercial building: 200m safe walking distance of a bus stop OR metro/commuter rail station. Future expansions to transit services may qualify if they are already planned, funded and expected to be operational within 3 years of building occupancy.	1	Communities Only	PT1. Proximity PT3. Quality AT1. Proximity of pedestrian and wheeling route
	Requirement #2 In addition to requirement #1, the day-time service of the bus stop or the metro/commuter rail station is more frequent than 30 minutes.	1		
	Requirement #1 Outdoor Comfort Strategy An Outdoor Comfort Strategy is developed and implemented in line with the specific requirements in the Supporting Guidance.	1		

CW-01 Outdoor Comfort	**Requirement #2** Shading Provision - A minimum of 20% shading cover is provided to pedestrian walkways and bicycle paths on at least one side of the street, along with shade refuges every 100m. - A minimum of 50% shading cover is provided to: o Playgrounds o Car parks - 100% shading cover is provided to: o Community transit stops (e.g. bus stops, tram stops) o Bicycle parking	2	Communities Only	PT6. Innovation AT11. Innovation
	Requirement #3 Solar Reflectance Index (SRI) The three-year aged Solar Reflectance Index (SRI) values of the hardscape and shade structures meet the following: - Hardscape: 90% of the hardscape covering has an SRI ≥ 45 - Shade structures: 100% of the shade structures have an SRI ≥ 75	1		
	Requirement #4 Computational Fluid Dynamics Computational fluid dynamics (CFD) simulation is used to demonstrate that all hotspots have been eliminated.	2		
CW-02 Active Communities	**Requirement #1** Two recreational facilities are provided within 350m safe walking distance of at least 75% of residential and commercial buildings. One recreational facility is indoors and one is outdoors. A long-term commitment is provided for the regular maintenance and cleaning of all recreational facilities.	1	Communities Only	AT11. Innovation
	Requirement #2 In addition to requirement #1, a further two recreational facilities are provided within 350m safe walking distance of at least 75% of residential and commercial buildings. The recreational facilities can be indoors or outdoors.	1		
CW-04 Access for All	**Requirement #1** An Accessibility Strategy is developed and implemented for the project. There is a level, accessible pedestrian crossing at every street intersection and every 100m along streets with a design speed > 40 km/h.	1	Communities Only	AT1. Proximity of pedestrian and wheeling route AT2. Quality
	Requirement #2 A Wayfinding Strategy is developed and implemented for the project.	1		
EI-01 Sustainability Manual	**Requirement #1** A Sustainability Manual is produced for the Owners and developers of the buildings within the community.	1	Communities Only	PT1. Proximity PT5. Information, Promotion, and Services PV10. Information, Promotion, and Services AT10. Information, Promotion, and Services SW5. Performance
	Requirement #2 A minimum Mostadam rating of Green is required for each residential and commercial building within the community under Mostadam for Residential Buildings or Mostadam for Commercial Buildings.	1		
EI-02 Sustainability Communication	**Requirement #1** A Sustainability Communication Strategy is developed and implemented that educates residents and visitors on the sustainability achievements of the design and construction of the community.	2	Communities Only	PT1. Proximity PT5. Information, Promotion, and Services PV10. Information, Promotion, and Services AT10. Information, Promotion, and Services SW5. Performance
	Requirement #2 The Sustainability Communication Strategy is implemented using one of the following methods, or a combination of the two: - Continual Communication: Initiatives to boost residents' and visitors' awareness of the sustainability aspects of the community and encourage their participation in organized campaigns and activities. - Stationary Communication: Educate residents and visitors on the sustainable features of the community using prominent and adequate signage in public spaces.			
EI-03 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative design or construction solution is adopted that improves the durability or flexibility of the building or reduces maintenance requirements.	2	Communities Only	PT6. Innovation AT11. Innovation SW6. Innovation
	Requirement #1 A low-energy external lighting system is designed and specified as follows: - The minimum lux levels and uniformity requirements are in line with the applicable IESNA standard. - Whilst complying with the minimum uniformity values, the lux levels are not more than 30% greater than the applied design standard. - All roadway, pedestrian walkway, functional, operational and bicycle path lighting use high efficiency LEDs with a minimum of 125 lumens/Watt. - All traffic lights and directional signage lighting use only LED lights.	1		PV5 : Security and Lighting

E-02 External Lighting	**Requirement #2** The following external lighting control strategies are implemented: - All lighting has timers or photocells which will switch off external lighting during daylit hours. - All security and car parking lighting is linked to passive infrared (PIR) sensors to be utilized as PIR-based motion detectors, subject to confirmation from the project's Security Specialist and in line with the project's specific security requirements. - External decorative lighting is switched on by timers and during non-daylit hours only.	1	Communities Only	AT2. Quality AT4. Quality
	Requirement #3 75% of all exterior public realm lights are self-contained solar lights.	1		

ModeScore-Mostadam Alignment

for: Mostadam for Communities

O+E (2019 Manual)

CC-01 Walkable Public Realm	**Requirement #1** A safe, accessible and continuous pedestrian network connects each building to nearby amenities and transit stops. The pedestrian network achieves at least two of the following: - Street trees or landscaping run adjacent to pedestrian walkways on residential blocks. - Continuous walkways are provided on both sides of the roads for at least 85% of the pedestrian network. - Building plots along non-residential and mixed-use blocks have pedestrian entrances every 50m or less. - Pedestrians can access public buildings without walking through a surface parking lot.	2	Communities Only	PT3. Quality AT2. Quality
	Requirement #2 In addition to requirement #1, the pedestrian network complies with one of the following: - A Connectivity Index of 1.4 or greater. - An Intersection Density of at least 54 per km2.	1		
CC-02 Bicycle Network	**Requirement #1** The community's bicycle network complies with the following requirements: - Bicycle lanes in the network are clearly marked as being only for bicycles or other individual transportation vehicles and are at least 1.5m wide (or 3m wide for two-way lanes). - Shaded rest areas for cyclists are provided every 1500m. - Shaded and secure parking racks for bicycles and other individual transportation vehicles are provided at key destinations in the public realm. Future expansions to bicycle networks may qualify if they are already planned, funded, and expected to be operational within 3 years.	1	Communities Only	AT1. Proximity of pedestrian and wheeling route AT2. Quality AT3. Proximity of active travel routes AT4. Quality
	Requirement #2 In addition to requirement #1: - The bicycle network is physically separated from both vehicular and pedestrian traffic on all roads that have a design speed >40km/h or more than two lanes of traffic in the same direction.	1		
	Requirement #3 In addition to requirement #1: - 75% of buildings are located within 180m bicycling distance of a bicycle network that connects directly to five amenities within 5km.	1		
CC-03 Integrated Parking	**Requirement #1** A Parking Management Strategy is developed and implemented for the community.	1	Communities Only	PV2. Electric Parking PV5. Security and Lighting PV6. Management AT5. Accessibility - Use of the development
	Requirement #2 Parking structures have a pedestrian-friendly interface with the public realm, including: - Sidewalks along all adjacent roads, which take into consideration the corridor width requirements for individuals with special needs. - Clearly marked crosswalks and signage at each vehicle entrance/exit. - A visually interesting façade at ground level. On-street parking is buffered from bicycle lanes as per CC-02 Bicycle Network.	1		
	Requirement #3 A Curb Management Strategy is implemented for the project. Electric Vehicle Supply Equipment (EVSE) is provided for 2% of all public realm parking spaces, or at least two spaces, whichever is greater.	1		
	Requirement #4 A Parking Cleaning and Maintenance Procedure is developed and implemented for the community parking areas.	1		
CC-04 Access for All	**Requirement #1** An Accessibility Strategy is developed and implemented for the project. There is a level, accessible pedestrian crossing at every street intersection and every 100m along streets with a design speed > 40 km/h.	2	Communities Only	AT1. Proximity of pedestrian and wheeling route AT2. Quality
	Requirement #2 A Wayfinding Strategy is developed and implemented for the project.	1		
EI-01 Sustainability Manual	**Requirement #1** A Sustainability Manual is developed and distributed to the buildings within the community that describes the community's targeted credits and the ways in which the buildings can coordinate with and support the sustainability aspirations of the community.	2	Communities Only	PT1. Proximity PT5. Information, Promotion, and Services PV10. Information, Promotion, and Services AT10. Information, Promotion, and Services SW5. Performance

EI-03 Sustainability Communication	**Requirement #1** Sustainability Communication Strategy A Sustainability Communication Strategy is developed and implemented that educates residents and visitors on the sustainability achievements of the design, construction and operation of the community. The Sustainability Communication Strategy is implemented using one of the following methods, or a combination of the two: - Continual Communication: initiatives to boost residents' and visitors' awareness of the sustainability aspects of the community and encourage their participation in organized campaigns and activities. - Stationary Communication: educate residents and visitors on the sustainable features of the community using prominent and adequate signage in public spaces.	2	Communities Only	PT1. Proximity PT5. Information, Promotion, and Services PV10. Information, Promotion, and Services AT10. Information, Promotion, and Services SW5. Performance
	Requirement #2 Sustainability Communication Survey In addition to requirement #1, a Sustainability Communication Survey of the community's residents and visitors is conducted every year. The Sustainability Communication Strategy is reviewed and enhanced based on the residents and visitors' feedback.	1		
EI-04 Innovation	**Requirement #1** Option 1: The requirements of an eligible Mostadam credit are surpassed. Option 2: An innovative design or construction solution is adopted that improves the durability or flexibility of the building or reduces maintenance requirements.	2	Communities Only	PT6. Innovation AT11. Innovation SW6. Innovation
CW-01 Outdoor Comfort	**Requirement #1** Shading Provision - A minimum of 20% shading cover is provided to pedestrian walkways and bicycle paths on at least one side of the street, along with shade refuges every 100m. - A minimum of 50% shading cover is provided to: o Playgrounds o Car parks - 100% shading cover is provided to: o Community transit stops (e.g. bus stops, tram stops) o Bicycle parking	2	Communities Only	PT6. Innovation AT11. Innovation
	Requirement #2 Solar Reflectance Index (SRI) The three-year aged Solar Reflectance Index (SRI) values of the hardscape and shade structures meet the following: - Hardscape: 90% of the hardscape covering has an SRI ≥ 45 - Shade structures: 100% of the shade structures have an SRI ≥ 75	2		
CW-02 Active Communities	**Requirement #1** Two recreational facilities are provided within 350m safe walking distance of at least 75% of residential and commercial buildings. One recreational facility is indoors and one is outdoors. A Recreational Facilities Cleaning and Maintenance Procedure is developed and implemented for all indoor and outdoor recreational facilities within the community.	2	Communities Only	AT11. Innovation
	Requirement #2 In addition to requirement #1, a further two recreational facilities are provided within 350m safe walking distance of at least 75% of residential and commercial buildings. The recreational facilities can be indoors or outdoors.	1		

Appendix B

Supporting Guidance for Design Out Waste Requirements (Commercial – Residential and Communities)

Design for Flexibility

d. All structural elements of the building are excluded from the area calculations.
e. HVAC, electrical, and plumbing systems should be designed in a way to be flexible for changes in the space layout. Changes in these systems need to be limited only to replacement of fittings and fixtures, and any configuration in controls or building management system (BMS).
f. Methodology:
    1) Draft a list of parameters to evaluate different options of partitions that can be used in the project (different parameters can be applied for different partitions). Examples of parameters: cost effectiveness, acoustic/thermal performance, installation speed, recyclability, environmental impact.
    2) Check if demountable partitions compares well to non-demountable partitions when taking into account all the chosen parameters. When a compromise is necessary, decide if it is worth it to make it (for example sacrificing some cost effectiveness for more recyclability).
    3) Calculate the percentage of partitions that can be specified as demountable and check if the requirement's threshold is met.
    4) Consult with the owner on whether or not an unfinished flooring and false ceiling can be implemented. Usually the owner can install a finished floor and ceiling for one sample office or apartment and leave it for tenants or buyers to decide whether or not to adopt the sample finishing.
    5) If an unfinished floor and false ceiling is not an option, scan the market for modular products that can be installed as an alternative to conventional options.
    6) Check if the selected option(s) can cover the 75% requirement threshold. It should be clear that both 75% of all indoor flooring (excluding parking spaces) and false ceiling should be unfinished and/or modular for this requirement to be met. Spaces with no false ceiling can be counted towards meeting the compliant false ceiling threshold.
    7) Work with the architectural and MEP team to determine if MEP connections (excluding sewers) can be integrated within an interstitial space, a false ceiling, or shafts as an alternative to embedding them in concrete. Consider as well the option of having MEP connections apparent.
    8) Calculate to see if 75% of all MEP connections (excluding sewers) at a minimum do meet the requirement's criteria.

Repurposing & Salvaging

a. Draft a materials' catalog showing all the materials that can be salvaged.
b. Consider reusing some or all of the materials obtained on site or consider selling them to a third party that manages sales.
c. In case the project does not involve any demolition, scour the market for salvaged building components that can be used in your project.

d. Decide what are the salvaged materials and components can be used and their quantities.

Integration of Prefabricated Elements

a. Contact suppliers of prefabricated structural elements (columns, beams, slabs) and get quotations.
b. Determine the financial and technical feasibility of replacing cast-on-site structural components with prefabricated alternatives.
c. If the option was deemed desirable, calculate the percentage of structural elements that are prefabricated out of the total volume of structural elements.
d. If the percentage meets the threshold set in the requirements, highlight the prefabricated elements in the structural drawings and prepare the required evidence.

Standardization

a. Before the concept design phase, communicate with the architect the standardization requirements and confirm that they will be implemented in the design.
b. Prepare a standardization document that contains the schedule of the standard openings or structural elements as well as the standard room dimensions.
c. Communicate the standardized sets with the contractor and the subcontractors that are responsible for implementation.

Durability of Materials

a. As the design progresses, work with the project team to determine the effect that deteriorate the durability of the built structure, finding the best protection measures that can be implemented.
b. Make a list of all the effects and the corresponding protection measures.
c. Implement the chosen protection measures into the design documents, details, and specifications.

Applicable Components and Weathering Effects (Durability of Materials)

Applicable Components for Protection	Weathering Effects	Example of Protection Measures
1. Foundation, substructure, and retaining walls	Water or moisture Roots of vegetation Corrosion Rotting	Coating protection Waterproofing Anti-root layer
2. External walls	Car traffic Solar radiation Temperature variation Water or moisture Wind Roots of vegetation Pests, insects Abrasion	Bollards, wheel stops, and corner protection Coating protection Non-toxic pesticide or fungicide (part of an integrated pest management strategy) Waterproofing Anti-root layer
3. Roof or balconies	Solar radiation Temperature variation Water or moisture Wind	Bollards, wheel stops, and corner protection Coating protection Non-toxic pesticide or fungicide (part of an integrated pest management strategy)

		Waterproofing Reinforced mechanical fixation (such as for cladding) Expansion joints Anti-root layer
4. Glazing: windows, skylight	Solar radiation Temperature variation Water or moisture Wind	Coating protection Waterproofing Reinforced mechanical fixation Expansion joints
5. External doors	Temperature variation Water or moisture Corrosion Abrasion	Coating protection Waterproofing Reinforced mechanical fixation
6. External balustrades	Solar radiation Temperature variation Wind Corrosion Abrasion	Coating protection Reinforced mechanical fixation
7. External cladding	Car traffic Solar radiation Temperature variation Water or moisture Wind Pests, insects Corrosion Rotting Abrasion	Bollards, wheel stops, and corner protection Coating protection Non-toxic pesticide or fungicide (part of an integrated pest management strategy) Waterproofing Reinforced mechanical fixation (such as for cladding) Expansion joints
8. External staircases or ramps	Solar radiation Temperature variation Water or moisture Roots of vegetation Corrosion Abrasion	Waterproofing Expansion joints Anti-root layer
9. Hardscaping	Car traffic Solar radiation Temperature variation Water or moisture Roots of vegetation Pests, insects Corrosion Rotting Abrasion	Bollards, wheel stops, and corner protection Coating protection Non-toxic pesticide or fungicide (part of an integrated pest management strategy) Waterproofing Reinforced mechanical fixation Expansion joints Anti-root layer

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