# Green Star Short ReportRound [1/2]

Ensure all prompts shown in Blue text have been responded to.

Green Star – Office Design v3

Credit: Mat-6 Steel

Project Name: [name]

Project Number: GS- [####]

Points available: 2 Points claimed: [1, 2 or, N/A]

1. Credit Compliance

The following chapters of this template are relevant for projects targeting points for this credit:

Table 1 Steel Quantity Summary

|  |  |  |
| --- | --- | --- |
| Type of steel | Mass (tonnes) | Percentage of total steel used in structure (%) |
| Structural Steel |  |  |
| Reinforcing Steel |  |  |
| Other Steel |  |  |

### 1.1 Structural Steel

### 1.1.1 Structural Steel meets or exceeds Category A and Category B

Structural steel makes up at least 60% of all steel used in the building’s structure. Of this, at least 95% of all Category A products and at least 25% of all Category B products meet or exceed the nominated strength grades. The complying structural steel is permanently marked with its strength grade. Table 2 provides a list of all compliant structural steel.

 [Please insert hyperlinks to documents which support this claim]

Table 2 Schedule of Compliant Structural Steel

| Type of steel | Steel Strength | Quantity (mass) | Steel Strength met? Y/N | Permanently Marked?Y/N |
| --- | --- | --- | --- | --- |
| Category A Products |
| **Roof sheeting** | **550MPa** |  |  |  |
| **Wall sheeting** | **550MPa** |  |  |  |
| **Profiled steel decking** | **550MPa** |  |  |  |
| **Purlins** | **450MPa** |  |  |  |
| **Girts** | **450MPa** |  |  |  |
| **Light-steel framing systems\*** | **450MPa** |  |  |  |
| *****Sub-total Category A steel*****  |  |  | [x] tonnes |  |
| ***% of compliant steel*** |  |  | [x]%  |  |
| **Category B Products** |  |  |  |  |
| **Hot rolled structural steels (including plate)** | **350MPa** |  |  |  |
| **Cold formed sections (including hollow sections)** | **450MPa** |  |  |  |
| **Welded sections**  | **400MPa** |  |  |  |
| ***Sub-total of Category B steel***  |  |  | [x] tonnes |  |
| ***% of compliant steel*** |  |  | [x]%  |  |
| **Total quantity of structural steel specified for the project** |  |  | [x] tonnes |  |

[Please insert hyperlinks to documents which support this claim]

Therefore, as demonstrated in section 1.1.1, this project is eligible to achieve [1] point for encouraging reduced use of structural steel.

### 1.1.2 Accredited structural steel fabricator

At least 60% of the fabricated structural steel is supplied by a steel fabricator/ steel contractor that is accredited under the Environmental Sustainability Charter of the Australian Steel Institute (ASI) (that is, is ISO 14001 accredited and/ or a member of the World Steel Association (WSA) Climate Action Program (CAP)). Table 3 provides a list of the compliant fabricators.

Table 3 Fabricator/Contractor accredited to the ASI ECS

|  |  |  |
| --- | --- | --- |
| Product  | Non-ASI Fabrication (tonnes) | ASI-ESC Fabrication (tonnes) |
| E.g. Fabricator 1 |  |  |
| [insert rows as needed] |  |  |
| Total  |  |  |
| Percentages | **X%** | **X%** |

Therefore, as demonstrated in section 1.1.2, this project is eligible to achieve [1] point for encouraging the use of structural steel that has been produced and designed in an environmentally responsible manner.

### 1.2 Reinforced Steel

### 1.2.1 Use of energy-reducing processes in manufacture

Reinforcing steel makes up at least 60% of all steel used in the building’s structure. Of this, at least 95% of all reinforcing bar and mesh meets or exceeds 500MPa strength grade and is produced using low energy methods.

Table 4 Reinforcing steel grades used on the project

| Product | <500Mpa (tonnes)  | ≥ 500 Mpa (tonnes)  |
| --- | --- | --- |
| E.g. [reinforcing mesh to basement slab] | 0 | 205 |
| **Mesh** | **0** | **50** |
| **[insert rows as needed]** |  |  |
| ****Total**** |  | **255** |
| ****Percentages**** | **0%** | ****100%**** |

*Strength Grade requirement met for more than 95% of steel in concrete products.*

Energy reducing process [describe the energy reducing process used to produce the steel]

Table 5 provides a summary of all reinforcing steel that has been manufactured using energy reducing technologies.

Table 5 Use of Energy Reducing Technologies (ERT) in steel manufacture

|  |  |  |  |
| --- | --- | --- | --- |
| Product  | Reinforcing steel (tonnes) | Manufacturer’s annual average production using ERT (%) | Average mass of ERT steel |
| E.g. reinforcing bar supplier 1 | 205  | 73% | 150 |
| Supplier 2 | 40 | 73 | 28 |
| Supplier 3 | 10 | 0 | 0 |
| Total | **255** |  | **178** |
| Percentages (178/255) |  |  | **69%** |

Therefore, as demonstrated in section 1.2.1, this project is eligible to achieve [1] point for encouraging the use of structural steel that has been manufactured using Energy Reducing Technologies.

### 1.2.2 Use of off-site optimal fabrication techniques

At least 95% of all reinforcing steel meets or exceeds 500MPa strength grade and at least 15% (by mass) of all reinforcing steel is assembled offsite using optimal fabrication techniques.

Table 6 Reinforcing steel grades used on the project

| Product | <500Mpa (tonnes)  | ≥ 500 Mpa (tonnes)  |
| --- | --- | --- |
| Eg [reinforcing mesh to basement slab] | 0 | 205 |
| **Mesh** | **0** | **50** |
| **[insert rows as needed]** |  |  |
| ****Total**** |  | ****255**** |
| ****Percentages**** | ****0%**** | ****100%**** |

*Strength Grade requirement met for more than 95% of steel in concrete products.*

Offsite Fabrication Methods [describe the offsite fabrication techniques used in the building’s structure]

Table 7 provides a summary of reinforcing steel prefabricated offsite.

Table 7 Reinforcing steel prefabricated offsite

|  |  |  |
| --- | --- | --- |
| Description  | Product name | Tonnes |
| E.g. Reinforcing carpet  | Carpet mesh | 20 |
| Custom meshes | - | 20 |
| Prefab cages  | - | 20 |
|  |  |  |
| Total  |  | 60 |
| Percentages (60/255) |  | **24%** |

*More than 15% of reinforcing steel is prefabricated offsite.*

[Insert hyperlinks to documents which support this claim]

Therefore, as demonstrated in section 1.2.2, this project is eligible to achieve [1] point for encouraging the use of steel that has been produced, designed and fabricated in an environmentally responsible manner.

### 2. Not Applicable

* The cost of steel represents less than 1% of the project’s total contract value; OR
* There are no new structural or reinforcing steel used in the project.

[Insert hyperlinks to documents which support this claim]

Therefore, as demonstrated in section 2 this credit is considered ‘Not Applicable’ and is excluded from the points used to calculate the Materials Category Score.

## Discussion

[Insert any issues you would like to highlight and clarify to the Assessment Panel.]

Author Details:

[Insert name, position and contact details of author]

[Date]

––– **Report end** –––