ASSESSMENT PROCESS

Given the increase in candidates sitting the 2013 examination compare to 2012, the assessment process ensured that all papers were assessed a minimum of two times by different assessors.

5 Assessors marked the papers. This was done by 2 assessors each marking a different question from the same section. The same assessors swapped and checked and moderated the assessments made by the first. During this stage assessors working on the other section where called upon for advice. Finally, all answers in the D range where checked for a third and sometimes a fourth time. The fifth and independent assessor worked with both teams. The same independent assessor also checked all D range responses in Questions 3 and 4.

Result Statistics

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Question 1 (Criterion 3)

Responses from the A & B levels

Students with an A, & B levels, were clearly able to communicate their understanding of solar passive principals in a clear and precise manner. Issues regarding solar gain, shading from trees and location of room zoning were all successfully addressed.

A level students addressed the question correctly with little to no superfluous information. Annotations were used correctly and efficiently and further annotations were made explaining additional alterations that could be done to the dwelling to increase its efficiency. A level students, had a good understanding of thermal mass.

B grade students were able to communicate criterion understanding with most issues for this question being addressed. A good mix of diagrams and text was used to demonstrate knowledge.
Responses from the C levels

C level students were able to demonstrate a basic understanding of cool temperate climates, but were not able to successfully relate their knowledge to the detailed aspects of the question. Generally, annotations on thermal mass were incorrect and confused responses to the criterion. C level students concentrated too much on renovating the dwelling, rather than answering the question presented. Major errors were identified in some annotations relating to how insulation and thermal mass work.

General Comments

Question one required students to evaluate existing dwellings and comment on their inefficiencies rather than design. Some students included information not required to answer the question and not relating to criterion 3. In general, students had a limited understanding of thermal mass, specifically in relation to brick veneer. There was also significant misunderstanding of the relation between thermal mass and insulation.

A level students were able to note observations, give explanations to their observations, and then make recommendations about possible changes. B students made observations and explanations, while C students only provided observations.

Question 2 (Criterion 3)

Responses from the A & B levels

Students within the A and B range demonstrated a strong understating of the hot humid climate type and annotated many design techniques to answer the question. Students in this band were able to choose the most environmentally sustainable orientation and positioning of the building on the site plan by correctly interoperating the sites conditions. Students were also able to propose further successful landscaping solutions enhancing their designs. The building being orientated with its longest edge facing directly north showing clear cross ventilation from North to South were present in all answers, and showed planning which was well resolved. Students within these grades demonstrated sound design knowledge and a clearly structured response particularly through a strong use of the cross section often showing and sometimes extending detailed information based on criterion 3.

Responses from the C levels

Student responses in the C range were able to list and demonstrate an understanding of the basic requirements of tropical conditions but in some cases were unable to explain the significance or reasons for employing these design decisions. Students in this band often incorrectly orientated the building but pleasingly were still able to show principles of cross ventilation if not always entirely correct.

General Comments

Generally this question was answered well. This question allowed for students to demonstrate a range of designs, which responded successfully to the question. A small number of students unfortunately decided to make up their own orientation of the site despite the large north point shown on the drawing. Also, a small number of students produced a second enlarged plan of their design to
communicate their knowledge and design thinking rather than the required cross section, which was a key component of the question.

**Criterion 4 - General comments**

Both questions in this section required students to design an extension of an existing dwelling. The existing dwelling and extension size were the same in both questions, but the scenarios and extension requirements differed. A substantial proportion of students (more than 50%) did not read the question *carefully enough* or did not understand the concept of square meters, and thus provided an inappropriate design solution. These students provided a design solution that utilized the complete potential extension zone (an area of 81 square metres, 9 metres X 9 metres). The question clearly asked the student to provide a design solution of 42 square metres *within* the space. This information was provided both in the question and on the answer sheet. The Examiners believe that this is a major reason for a skew towards proportionally more Cs and Ts and less awards at the A and B level for these questions.

**Question 3 (Criterion 4)**

The majority of students answering this question did so poorly, with only seven students overall gaining a result above a C. The most common reason for low results, with the exception of the non-compliance with required extension size, was the lack of accurate height annotations. Students may well have allowed appropriate widths for doorways, turning circles etc, but without heights specified it is impossible for an examiner to ascertain whether a design is accessible or not.

**Responses at the A level**

Addressed all the requirements of the brief in a sophisticated manner demonstrating an understanding of the spatial relationships between spaces, flow and zoning and at the same time providing evidence of understanding functional design and the accurate measurements required for accessible design. Clear annotations provided details and reasons for all pivotal design decisions.

**Responses at the B level**

Addressed all the requirements of the brief in a functional manner showing an understanding of zoning and at the same time providing evidence of the majority of accurate measurements required for accessible design. At this level this included the items specified in the C responses as well as the use of cavity sliding doors, accurate grab rail measurements, appropriate storage specified in relevant areas, mirror and vanity details, shower head, tap type and shower seat provision, study items detailed with detailed justifications for most items.

**Responses at the C level**

Addressed the essential requirements of the brief by providing the spaces required. Accessibility was generally addressed by showing detail of door widths, turning circles, heights of vanity, knee space, transfer space, shower details, grab rails, accessibility to bed, provision of basic storage all with basic justifications.
General comments:

- Students need to be accurate with their measurements in both drawings and annotations. A sketch marked ‘not to scale’ and annotations explaining an item e.g. vanity is ‘an appropriate height for a wheelchair’ or ‘lower’ is not sufficient. Students at this level should be able to accurately draw and annotate specific accessible design measurements.

- Students need to ensure they are complying with all design restrictions when answering the question, including the scale specified by examiners

- A positive has been to increasing use of small sketches to allow details such as heights and design details such as grab rails and under sink finishes to be shown.

Question 4 (Criterion 4)

Responses from the A & B levels

Students who provided responses that reflected an 'A' or 'B' rating clearly demonstrated, through both succinct annotation and accurate drawing and correct scale, justification for their design solution for the required use of the space. They also provided a solution that met the critical design requirements, whilst taking into consideration the given limitations of the design brief in the question.

Responses from the C levels

Students who provided responses that reflected a 'C' rating, either provided a design solution that fell short of some of the critical design requirements of the brief, provided a solution that did not address all the given design restrictions, or did not use scale as accurately as those students who received an A or B award.

General comments

Students who answer this question in the future should:

- Carefully read the question and consider what the design question is asking for (possibilities), and what are the design parameters (restrictions) in relation to the functional use of space;

- Only offer a design solution in the required scale, which is clearly provided in the question and on the answer sheet;

- Have a clear understanding of, and be able to draw to scale, basic furniture and fittings that are of a realistic size. Space cannot be cribbed by drawing very small furniture and fittings when providing a design solution;

- If utilizing bi-fold doors or sliding doors, consideration must be taken of where they fold or slide to and also the length of each door, which must equal the void. A squiggly line and an annotation titled ‘Bi fold door’ is not adequate enough;
• Annotation should be concise and be just an explanatory note, not an essay;

• Annotations should be used to provide detail that is not easily observed in the drawing. Some annotations should provide the what and where, but the majority of annotations should provide the why (a justification for the critical design decisions that the student has made);

• Only provide both drawings and annotation that reflect a response to the question and the specific criterion (Criterion 4). In one hour there is not enough time to add details such as thermal mass, insulation properties of walls etc., and the Examiner will not add extra marks for this information.

In general this question was not answered well. The Examiner believes that many students who responded to this question thought it was an easy option. In fact the reverse is true. For a student to answer this question well they must demonstrate the RIGOUR associated with the design requirements and the design restrictions, use scale accurately within the provided space and be able to articulate through concise but informative annotation, the justification for their chosen design solution.
## Award Distribution

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