

2021 Retrofit Deliverable Rubric

This rubric serves as a guide to help your team submit a high quality deliverable. Scoring will be based on the following criteria for each part of the deliverable. For more information, please refer to the general official rules, the design guide and the deliverable description document. This rubric shall serve **only** as a guide, and has no power to supersede or override the aforementioned documents. Any deliverable submitted that has more than 11 pages (including title page and **3-page** appendix for supplementary calculations) will not be scored.

Formatting reminders: 11 pt, single-spaced, US Letter (11x17 paper is permitted only for drawings in Part 1 with a maximum of 3 pages), Times New Roman font with 1 in. margins, 11 page limit. All pages should be submitted in one pdf file. The SAP2000 or ETABS file of the final model must also be submitted with this deliverable. Any deliverable that is not accompanied by a SAP2000 or ETABS file will not be scored.

Category/Part	An excellent document...	A poor document	Points
Title Page: Name of school, computer-generated image related to the deliverable, names of all team members and the designated team captain(s).	Contains all required items, neatly arranged on the title page.	Is missing one or more items.	Req'd
Part 1: Retrofit Implementation and Performance Assessment	Performance of the retrofitted structure is compared to performance of the structure with the addition prior to the retrofit and conclusions are supported with calculations and model results; sound reasoning is provided for how balsa wood retrofits relate to real retrofits; drawings and diagrams are informative and clear; ETABS or SAP model is submitted.	One or more required deliverable items is missing or incomplete; real retrofits are not investigated when determining balsa wood retrofits; reported time history analysis results are unreasonable or do not match the ETABS or SAP model; design decisions are not sufficiently supported with reasoning.	50
Part 2: Retrofit Conceptual Questions	Collapse risk and reduction factor are computed accurately and calculations are shown; real retrofit	Collapse risk and reduction factor are inaccurate; little to no effort is put into	20

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	techniques are thoroughly researched and real world examples are provided with sufficient detail of the retrofit methods.	researching retrofit techniques or finding real world examples.	
<i>Writing, Organization and Presentation:</i> Grammar, spelling, clarity, punctuation, sentence structure, word choice, neatness, aesthetics.	Is essentially free of grammar and spelling errors; each sentence is structured effectively; has a good range and accuracy of vocabulary; logically organized; formatted professionally.	Has many grammatical and spelling mistakes; contains poor sentence structure; extremely limited vocabulary; poorly organized; is not formatted appropriately.	25
<i>Work Cited or Reference Page:</i> Does not count for the page limit	Is consistent in format and all references or citations are correctly cited	Is inconsistent in format or not included in the document	Req'd
<i>Appendix:</i>	Contains the relevant calculations, design checks, and any related details; neatly presented and easy to follow	Poorly organized, contains irrelevant and redundant calculations; hard to follow	5