Project Deliverable E: Project Schedule and Cost

GNG 1103 – Engineering Design

Faculty of Engineering – University of Ottawa

Task List & Durations

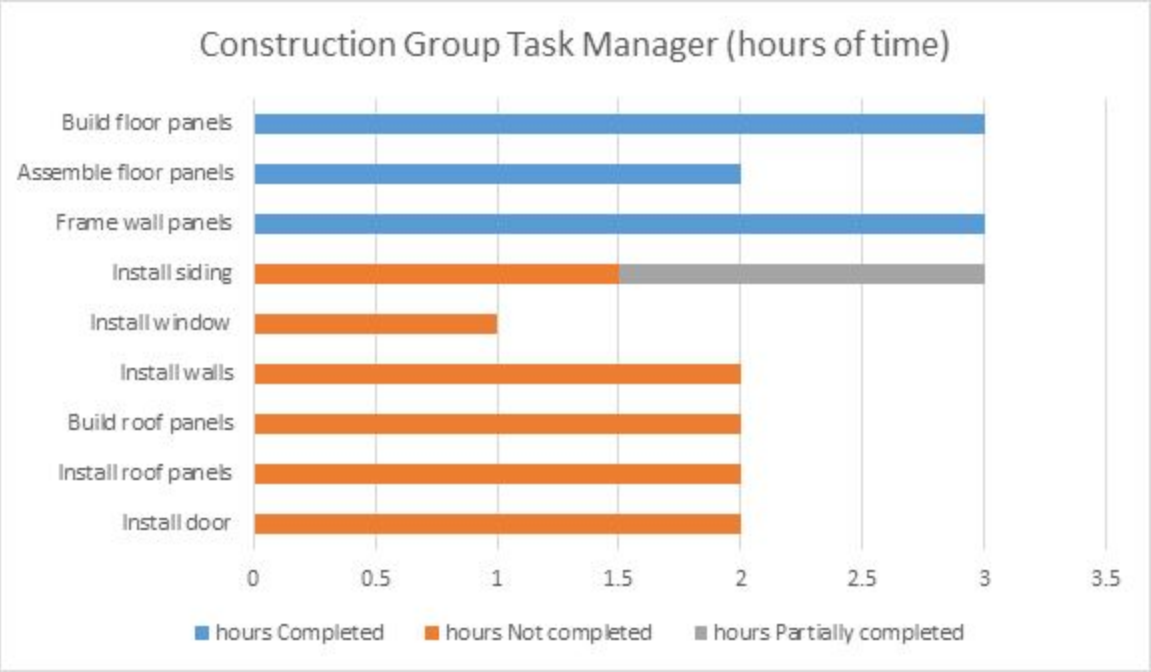
Task	*Duration of work (for seven people)*	*current status*
- Build floor Panels	- 3 hours	completed
- Assemble floor panels	- 2 hours	completed
- Frame Wall Panels	- 3 hours	completed
- Install siding onto one wall's worth of wall panels	- 3 hours	partially completed
- install window into wall panel(s)	- 1 hour	not completed
- Install walls	- 2 hours	not completed
- Build roof panels	- 2 hours	not completed
- Install roof panels	- 2 hours	not completed
- Install door	- 2 hours	not completed

Gantt Diagram

The construction team works on the project together as a team of seven members every monday during the lab session. As a result, all tasks are equally shared between the seven group members.

The following diagram shows the tasks that are required to be completed, the hours of work group involved for the group in completing each task, and how much of each task has been completed.

The order of precedence of the tasks is ranked in order of first to last, from top to bottom of the following gantt diagram.



Project Risks & Mitigations

Project Risks	***Mitigations***
- Modular panels not fitting together.	- Make sure panels are square before nailing plywood onto the frame. To do so, use a measuring tape to measure the distances between both corners.
- Siding could be cut poorly if care is not taken. saw	- The proper way to cut the siding is using the chop very slowly. Since the chop saw does not have the proper amount of width to cut through the entire width of the siding, we must flip it over and cut twice to obtain a clean cut straight through the siding.
- Middle panels and corner panels need to fit.	- We designed the shed to have overlaps on each Panel using the chip board. Each panel has an overlap on another panel and is overlapped by a panel as well.This makes the structure seal tightly.
- Bottom panels need to sit on floor. so	- The wall panels have an overlap on the bottom side that they fit around the floor, providing a more secure attachment
- Window needs to fit properly.	- The wall panels that include the window are built accordingly to the size of the window.
- There are risks of making mad lumber cuts.	- The blade is always used to cut the opposite side of the good piece in relation to the cutting line. This way the desired measurement is obtained each time.

Materials and Cost

Materials

- 2x6x8’ – 40
- 2x4x8’ – 60
- structural screws – 1 box of 500
- ¾” plywood – 1 sheet
- 7/16” OSB --15 sheets
- Vinyl siding – 64 square feet
- J – trim – 80 linear feet

Cost

- 2x6x8’ – 11 $ each
- 2x4x8’ – 2 $ each
- structural screws – 16 $ (box of 100)
- ¾” plywood – 58 $ (8x4) each
- 7/16” OSB -- 15 $ (8x4) each
- Vinyl siding – 65 $ (73.3 ft^2)
- J – trim – 7 $ (10 ft)

Material	Cost per unit	Quantity	Cost	Total cost
2x6x8’	$11	10	$110	**$490**
2x4x8’	$ 2	54	$108	
structural screws (box of 100)	$ 16	1	$16	
7/16” OSB	$ 15	9	$ 135	
Vinyl siding	$ 65 / box	1 box	$ 65	
J – trim	$ 7 / 10 feet	80 feet	$ 56	