HANDOUT: Rough Openings: Calculation (3 pages) Skill Builder: Tables & Lists, Technical Drawings

IN THE WORKPLACE: To ensure that doors and windows fit tight enough to prevent water and air leaks, rough openings must be made larger than the item to be installed. The added space allows for variations such as headers or floors that are out of level and openings that are slightly out of square.

Refer to the **Rough Openings** documents to complete the tasks and locate answers to the questions. Write the answers in the space provided or <mark>highlight</mark> the information on the blueprint.

- 1. Locate the following:
 - a) Frame width for a 5' door:
 - b) Opening height for the tallest 2'10" outswing door
 - c) Minimum rough opening width for the smallest double door available
 - d) Maximum opening height for 5' 8" door

2. Calculate the following:

- a) 80" in feet
- b) 63 ¼" in feet
- c) $84 \frac{1}{2}$ in feet



- 3. The rough opening was made for a 2'8" single door and should have been for a 4'8" double. Using the minimum rough opening dimensions for both, how much larger does the opening need to be?
- 4. Calculate the difference between the largest opening height for a 2'6" inswing door and a 5'4" double outswing door.
- 5. Label the illustration showing the rough opening measurement for the smallest double door shown in the chart.
- 6. Label the illustration showing the shortest rough opening height measurement for a 6' o'' double outswing door.
- 7. Refer to your textbook, or search online, to locate the rough opening width and heightfor a common window and door size. Label the illustration with those dimensions.



Rough Openings

| | Opening Width | | Opening Height | |
|---------------------|----------------------------|--|-------------------------------------|-------------------------------------|
| Door Description | Actual Frame Width Size | Stud to Stud Rough Opening Minimum | 6′ 8″ | 7′ 0″ |
| 2′ 0″ Single | 25 ½ " | 26 " | | |
| 2′ 4″ Single | 29 ½ " | 30" | Inswing 82" Outswing 81 ¼" | Inswing 86" Outswing 85 ¼" |
| 2' 6" Single | 31 ½ " | 32 " | | |
| 2' 8" Single | 33 ½ " | 34 " | | |
| 2′ 10″ Single | 35 ½ " | 36" | | |
| 3′ 0″ Single | 37 ½ " | 38" | | |
| 4' 8" Double | 58" | 58 ½ " | Incuring | Inquing |
| 5' 0" Double | 62" | 62 ½ " | 82″ | 86″ |
| 5' 4" Double | 66 " | 66 ½ " | | |
| 5' 8" Double | 70" | 70 1⁄2 " | Outswing | Outswing |
| 6'0" Double | 74" | 74 1⁄2 " | | 03 % |



Ref: Bow Valley College. (2020). Rough Openings. [table]. Calgary, Canada: Author.

