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Z Direction

X Direction

When the Colonist (marked by the brown circle) wants to move to the yellow square, they will check that all 4 immediate squares (marked by red) around are empty and have not got a block in place that may stop him from moving while also checking the square closest to the point he wants to reach (favouring the X direction over the Z), in this case they will move to the red tile “2”. The closest point is calculated using the magnitude between the current X point and ending X Point, and the same for Z. The Colonist also rotates to face the direction they’re moving.

If the next tile the Colonist is moving too is 1 block higher or lower with no obstructions then the Colonist will still move to that block. If there is an obstruction then the Colonist will navigate around it (explained in depth further down).

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When the Colonist checks these tiles now, they will move to tile 1 as the magnitude between the Z points is smaller than the magnitude between the X points. This will continue to happen until the Colonist reaches their final position.

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When there is an obstacle (marked by the black) and the Colonist trys to move to that tile, they will instead try to keep left of the wall until and opening can be seen or it reaches the same point on that axis. In this case the Colonist will move to the opening marked with an O and will continue to go east until they reach the block just below the yellow, as that is the first block they will get to that is on the same axis, once they reach this block they will pathfind using the same method as the previous examples. However, if the path towards the south is while trying to reach the block on the same axis, then the colonist will prioritise this path instead.

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In this case, the path shown by the arrow will be taken as it is shorter than the Southern path. Once the block at the end of the arrow is reached the colonist will then move towards the point in the same way described in the first example.