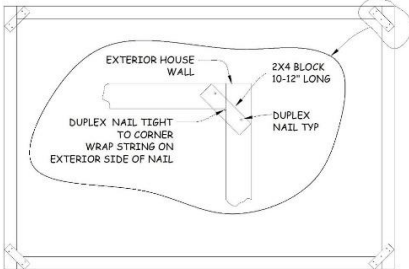


**Chapter 5 – Straightening Exterior Walls**

<p>Mount Corner String Line Supports</p>	<ol style="list-style-type: none"> <li>1. To straighten exterior walls, a <u>very taut</u> string line is stretched from one inside corner to an adjacent inside corner. The wall is aligned with the string line every 8' - 10' and braced to hold it in place.</li> <li>2. For each exterior wall corner, cut a scrap of 2x4 10" - 12" long.</li> <li>3. Drive a 16d duplex nail into the center of this 2x4. Be sure the nail is straight since the nail represents the inside of the wall corner. The upper part of the nail will be used to wrap the string line.</li> <li>4. Place the 2x4 piece on top of the 2x6 upper plates at roughly a 45° angle so the protruding end of the 16d duplex nail rests tightly against the "inside" corner of the upper plates of both walls.</li> </ol>  <ol style="list-style-type: none"> <li>5. Nail the 2x4 to the upper plates with one 16d duplex nail on each end. Nail securely, there will be a lot of tension on these.</li> <li>6. Repeat at each exterior corner.</li> </ol>
<p>Install String Line</p>	<ol style="list-style-type: none"> <li>7. In the first corner, start the string line on any nail <u>other than the centered nail</u>. (Feel free to add additional "tie-off" nails as needed.)</li> <li>8. Wrap the string line on the exterior side of the protruding centered nail, this should align the string line near the inside edge of the upper plate.</li> <li>9. Run the string line to the next corner, wrap it around the exterior of the protruding centered nail again. Continue until back to the starting corner. Make sure the string line is not obstructed between corners and is <b>VERY</b> taut.</li> <li>10. Verify the string line around each corner nail is aligned with the inside of the upper plates. Adjust as necessary using an additional 8d nail to move the string line in or out. The string line may not be aligned to the inside of the upper plate all along the wall expanse at this point but it <b>must</b> be aligned at each corner before straightening the walls between corners.</li> </ol>
<p>Straighten the Walls</p>	<ol style="list-style-type: none"> <li>11. Start 5'-7' from the corner.</li> <li>12. Place one end of a 6' level against the upper plate and the other end against a nearby stud – not the stud immediately below. (This 2-pt contact avoids problems with a bowed or twisted stud.)</li> <li>13. Slide the level up the wall until it reaches the string line.             <ol style="list-style-type: none"> <li>a. If the top of the level moves the string, use the turnbuckle pipe bracing to move the wall <u>in</u> until the inner edge of the level lines up with the string line.</li> <li>b. If the level misses the string line, move the wall <u>out</u> until the inside edge lines up with the string line. The wall is now straight in that section.</li> </ol> </li> <li>14. Do this at each pipe brace, each interior wall intersection, and every 5'-7' in between. Add pipe bracing or 2x4 bracing as needed to hold the wall straight.</li> <li>15. Re-check alignment with string line a second time. Verify wall is plumb at each brace and each intersecting wall location. Consult with Construction Supervisor or Site Leader if difference is more than 1/8".</li> <li>16. After all bracing is complete, recheck alignment by sighting along inside/outside edges of upper plate at each corner. Remove string line and blocks.</li> </ol>

## Quality Points

### Chapter 5 – Straightening Exterior Walls

- String line properly attached and VERY, VERY Taut
- String line calibrated to upper plate at corners (before straightening)
- Pipe bracing or 2x4 bracing installed to keep wall straight
- Each wall is plumb at each brace and each intersecting wall location with any difference less than  $\frac{1}{8}$ ".
- Alignment re-checked by sighting along inside/outside edges of upper plate at each corner.