<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>1' - 6&quot; (457)</th>
<th>2'- 0&quot; (610)</th>
<th>2'- 4&quot; (762)</th>
<th>2'- 8&quot; (813)</th>
<th>3'- 0&quot; (914)</th>
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<th>4’- 0&quot; (1219)</th>
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<tr>
<td>FS (mm)</td>
<td>1' - 5 1/2&quot; (445)</td>
<td>1' - 11 1/2&quot; (597)</td>
<td>2’- 6 1/2&quot; (762)</td>
<td>2’- 7 1/2&quot; (799)</td>
<td>2’- 11 1/2&quot; (902)</td>
<td>3’- 5 1/2&quot; (1054)</td>
<td>3’- 11 1/2&quot; (1207)</td>
</tr>
<tr>
<td>DLO (mm)</td>
<td>12 9/16&quot; (319)</td>
<td>18 9/16&quot; (471)</td>
<td>24 9/16&quot; (624)</td>
<td>26 9/16&quot; (675)</td>
<td>30 9/16&quot; (776)</td>
<td>36 9/16&quot; (929)</td>
<td>42 9/16&quot; (1081)</td>
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ESDH: Double Hung Thermal Performance Specifications

January 2020
2 Wide

<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>3'-0&quot; (914)</th>
<th>4'-0&quot; (1219)</th>
<th>5'-0&quot; (1524)</th>
<th>5'-4&quot; (1626)</th>
<th>6'-0&quot; (1829)</th>
<th>7'-0&quot; (2134)</th>
<th>8'-0&quot; (2438)</th>
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<td>8'-0&quot; (2438)</td>
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<td>FS (mm)</td>
<td>2'-11 1/2&quot; (902)</td>
<td>3'-11 1/2&quot; (1207)</td>
<td>4'-11 1/2&quot; (1511)</td>
<td>5'-3 1/2&quot; (1600)</td>
<td>6'-11 1/2&quot; (2121)</td>
<td>7'-11 1/2&quot; (2426)</td>
<td>8'-0&quot; (2438)</td>
</tr>
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</table>

Examples:
- ESDH1620
- ESDH1626
- ESDH1630
- ESDH1636
- ESDH1640
- ESDH1646
- ESDH1650
- ESDH1660
- ESDH3020
- ESDH3026
- ESDH3030
- ESDH3036
- ESDH3040
- ESDH3046
- ESDH3050 E
- ESDH3056 E
- ESDH3060 E
- ESDH3066 E
- ESDH4020
- ESDH4026
- ESDH4030
- ESDH4036
- ESDH4040
- ESDH4046
- ESDH4050 E
- ESDH4056 E
- ESDH4060 E
- ESDH4066 E

January 2020
## MARVIN ESSENTIAL™ COLLECTION
### DOUBLE HUNG

#### 3 Wide

<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>4' - 6&quot; (1372)</th>
<th>6' - 0&quot; (1829)</th>
<th>7' - 6&quot; (2286)</th>
<th>8' - 0&quot; (2438)</th>
<th>9' - 0&quot; (2743)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO (mm)</td>
<td>4' - 6&quot; (1372)</td>
<td>6' - 0&quot; (1829)</td>
<td>7' - 6&quot; (2286)</td>
<td>8' - 0&quot; (2438)</td>
<td>9' - 0&quot; (2743)</td>
</tr>
<tr>
<td>FS (mm)</td>
<td>4' - 5 1/2&quot; (1359)</td>
<td>5' - 11 1/2&quot; (1816)</td>
<td>7' - 5 1/2&quot; (2273)</td>
<td>7' 11 1/2&quot; (2413)</td>
<td>8' - 11 1/2&quot; (2731)</td>
</tr>
</tbody>
</table>

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<td>8' - 11 1/2&quot; (2731)</td>
</tr>
</tbody>
</table>

### Diagrams

- [Diagram 1](ESDH1620.png)
- [Diagram 2](ESDH2020.png)
- [Diagram 3](ESDH2620.png)
- [Diagram 4](ESCH2820.png)
- [Diagram 5](ESCH3026.png)
- [Diagram 6](ESDH1626.png)
- [Diagram 7](ESDH2026.png)
- [Diagram 8](ESDH2626.png)
- [Diagram 9](ESCH2826.png)
- [Diagram 10](ESCH3026.png)
- [Diagram 11](ESDH1630.png)
- [Diagram 12](ESDH2030.png)
- [Diagram 13](ESDH2630.png)
- [Diagram 14](ESCH2830.png)
- [Diagram 15](ESCH3030.png)
- [Diagram 16](ESDH1636.png)
- [Diagram 17](ESDH2036.png)
- [Diagram 18](ESDH2636.png)
- [Diagram 19](ESCH2836.png)
- [Diagram 20](ESCH3036.png)
- [Diagram 21](ESDH1640.png)
- [Diagram 22](ESDH2040.png)
- [Diagram 23](ESDH2640.png)
- [Diagram 24](ESCH2840.png)
- [Diagram 25](ESCH3040.png)
- [Diagram 26](ESDH1646.png)
- [Diagram 27](ESDH2046.png)
- [Diagram 28](ESDH2646.png)
- [Diagram 29](ESCH2846.png)
- [Diagram 30](ESCH3046.png)
- [Diagram 31](ESDH1650.png)
- [Diagram 32](ESDH2050.png)
- [Diagram 33](ESDH2650.png)
- [Diagram 34](ESCH2850.png)
- [Diagram 35](ESCH3050.png)
- [Diagram 36](ESDH1656.png)
- [Diagram 37](ESDH2056.png)
- [Diagram 38](ESDH2656.png)
- [Diagram 39](ESCH2856.png)
- [Diagram 40](ESCH3056.png)
- [Diagram 41](ESDH1660.png)
- [Diagram 42](ESDH2060.png)
- [Diagram 43](ESDH2660.png)
- [Diagram 44](ESCH2860.png)
- [Diagram 45](ESCH3060.png)
- [Diagram 46](ESDH1666.png)
- [Diagram 47](ESDH2066.png)
- [Diagram 48](ESDH2666.png)
- [Diagram 49](ESCH2866.png)
- [Diagram 50](ESCH3066.png)

January 2020
### DOUBLE HUNG

#### 4 Wide

<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>RO (mm)</th>
<th>FS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6' - 0&quot; (1829)</td>
<td>6' - 0&quot; (1829)</td>
<td>5' - 11 1/2&quot; (1816)</td>
</tr>
<tr>
<td>8' - 0&quot; (2438)</td>
<td>8' - 0&quot; (2438)</td>
<td>7' - 11 1/2&quot; (2426)</td>
</tr>
</tbody>
</table>

GBG available in standard Rectangular lite cut, shown. Other GBG lite cuts shown on page 3.

E = These windows (in equal sash) meet National Egress Codes for fire evacuation. Local codes may differ.

Details and Elevations not to scale.

Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20, 60, and 66 call number heights.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

#### MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".

Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".

Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

January 2020
**MARVIN ESSENTIAL™ COLLECTION**

**DOUBLE HUNG** - Transoms and Multiple Assemblies

### Transom Mulled Over Double Hung

<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>RO (mm)</th>
<th>FS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-6&quot; (762)</td>
<td>2'-6&quot; (762)</td>
<td>2' - 5 1/2&quot; (749)</td>
</tr>
</tbody>
</table>

![ESDHTR2616](image)

### Transom Mulled Over Double Hung 2 Wide

<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>RO (mm)</th>
<th>FS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'-0&quot; (1524)</td>
<td>5'-0&quot; (1524)</td>
<td>4' - 11 1/2&quot; (1511)</td>
</tr>
</tbody>
</table>

![ESDHTR5016](image)

### Double Hung Flankers with Center Picture*

<table>
<thead>
<tr>
<th>MO (mm)</th>
<th>RO (mm)</th>
<th>FS (mm)</th>
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</thead>
<tbody>
<tr>
<td>10'-0&quot; (3048)</td>
<td>10'-0&quot; (3048)</td>
<td>9' - 11 1/2&quot; (3035)</td>
</tr>
</tbody>
</table>

![ESDH2646 / ESDHP5046 / ESDH2646](image)

### Double Hung Flankers with Center Operator

<table>
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<th>MO (mm)</th>
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<tbody>
<tr>
<td>7'-6&quot; (2266)</td>
<td>7'-6&quot; (2266)</td>
<td>7'-5 1/2&quot; (2273)</td>
</tr>
</tbody>
</table>

![ESDH2646 / ESDH2646 / ESDH2646](image)

### Construction Details

![Diagram](image)

**DOUBLE HUNG - Transoms and Multiple Assemblies**

*This product is only available field mullled. Details and Elevations not to scale. Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20, 60, and 66 call number heights. Obscure Glass option available on all units. Special sized units available within product size matrix. See your Marvin retailer.*

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