

# TABLE OF CONTENTS

1.	<u>Background and Methodology.....</u>	<u>6</u>
	A. <u>Project Background.....</u>	<u>6</u>
	B. <u>Methodology.....</u>	<u>7</u>
2.	<u>Total Window and Door Shipment Summary.....</u>	<u>8</u>
3	<u>Key Factors Affecting the State of the Industry.....</u>	<u>11</u>
3.1	<u>Key Macro Drivers.....</u>	<u>12</u>
	A. <u>Household Growth.....</u>	<u>13</u>
	B. <u>Unemployment Rate.....</u>	<u>14</u>
	C. <u>Labor Participation Rate.....</u>	<u>15</u>
	D. <u>Median Household Income.....</u>	<u>16</u>
	E. <u>Median Home Value.....</u>	<u>17</u>
	F. <u>Interest Rates.....</u>	<u>18</u>
	G. <u>Housing Affordability.....</u>	<u>19</u>
	H. <u>Home Sales.....</u>	<u>20</u>
	I. <u>Macro Driver Summary.....</u>	<u>21</u>
3.2	<u>Key Attitudinal Drivers.....</u>	<u>22</u>
	A. <u>Consumer Confidence.....</u>	<u>23</u>
	B. <u>Builder Confidence.....</u>	<u>24</u>
	C. <u>Contractor Confidence.....</u>	<u>25</u>
3.3	<u>HIRI/TFG COVID-19 Research.....</u>	<u>26</u>
	A. <u>Homeowner Project Starts.....</u>	<u>27</u>
	B. <u>Homeowner Project Cancellations.....</u>	<u>28</u>
	C. <u>Contractor Project Delays &amp; Cancellations.....</u>	<u>29</u>
	D. <u>Contractor Project Requests &amp; Closure Rates.....</u>	<u>30</u>
	E. <u>Contractor Concern &amp; Work Volume.....</u>	<u>31</u>
4.1	<u>U.S. Residential Housing Activity and Forecasts.....</u>	<u>32</u>
	A. <u>Summary – U.S. Residential Housing Activity.....</u>	<u>33</u>
	B. <u>Residential New Construction.....</u>	<u>34</u>
	C. <u>Historic and Forecasted U.S. Residential New Construction.....</u>	<u>38</u>
	D. <u>Historic and Forecasted U.S. Residential Remodeling.....</u>	<u>39</u>
	E. <u>Historic and Forecasted U.S. Home Improvement Spending.....</u>	<u>40</u>
	F. <u>Historic and Forecasted U.S. Residential Construction Spending.....</u>	<u>41</u>
	G. <u>Leading Indicator of Remodeling Activity.....</u>	<u>42</u>
	H. <u>Fannie Mae Economic Forecast.....</u>	<u>43</u>
4.2	<u>U.S. Non-Residential Activity and Forecasts.....</u>	<u>44</u>
	A. <u>U.S. Value of Construction Put in Place.....</u>	<u>45</u>
	B. <u>Projected Growth.....</u>	<u>46</u>
5.	<u>Residential Window and Patio Door Market Research.....</u>	<u>47</u>
	A. <u>Window and Patio Door – Definitions.....</u>	<u>48</u>

# TABLE OF CONTENTS - CONTINUED

6.	<u>Residential Window Market Research.....</u>	<u>49</u>
	A. <u>Units and Share.....</u>	<u>50</u>
	B. <u>Historic and Projected Growth.....</u>	<u>55</u>
7.	<u>Residential Sliding Patio Door Market Research.....</u>	<u>56</u>
	A. <u>Units and Share.....</u>	<u>57</u>
	B. <u>Historic and Projected Growth.....</u>	<u>61</u>
8.	<u>Residential Hinged Patio Door Market Research.....</u>	<u>62</u>
	A. <u>Units and Share.....</u>	<u>63</u>
	B. <u>Historic and Projected Growth.....</u>	<u>67</u>
9.	<u>Commercial Shop-Built Windows Market Research.....</u>	<u>68</u>
	A. <u>Units and Share.....</u>	<u>69</u>
	B. <u>Historic and Projected Growth.....</u>	<u>70</u>
10.	<u>Other Exterior Multi-Panel Door Systems.....</u>	<u>71</u>
	A. <u>Units and Share.....</u>	<u>72</u>
11.	<u>Appendix.....</u>	<u>74</u>
	A. <u>Bibliography.....</u>	<u>75</u>
	B. <u>Professional Contractor Research: 2019 vs 2018, 2020 Outlook.....</u>	<u>76</u>
	C. <u>Channel Research: Window and Door Sales: 2019 vs 2018, 2020 Outlook.....</u>	<u>77</u>