

## Table of Contents

<b>Workbook 1</b> .....	<b>6</b>
<b>Introduction</b> .....	<b>6</b>
<b>Installation Plan</b> .....	<b>7</b>
<b>Developing an Installation Plan</b> .....	<b>7</b>
<b>The Floor Plan</b> .....	<b>9</b>
<b>Types of Drawings</b> .....	<b>9</b>
<b>Floor Plan Sizes</b> .....	<b>10</b>
<b>Surroundings</b> .....	<b>10</b>
<b>Title Block</b> .....	<b>10</b>
<b>Legends and Symbols</b> .....	<b>11</b>
<b>Work Area Outlets</b> .....	<b>12</b>
<b>Detailed Symbols &amp; Telecom Cables</b> .....	<b>13</b>
<b>Building &amp; Telecom Spaces</b> .....	<b>14</b>
<b>Measuring Distances</b> .....	<b>15</b>
<b>Numbering</b> .....	<b>16</b>
<b>Group Pulling</b> .....	<b>17</b>
<b>Floor Plan Key Points</b> .....	<b>18</b>
<b>3 Areas of Cable Pulling in a Building</b> .....	<b>19</b>
<b>Horizontal</b> .....	<b>20</b>
<b>Riser</b> .....	<b>20</b>
<b>Work Area</b> .....	<b>20</b>
<b>Topology</b> .....	<b>21</b>
<b>Star Topology</b> .....	<b>21</b>
<b>Bus Topology</b> .....	<b>21</b>
<b>Ring Topology</b> .....	<b>21</b>
<b>Horizontal Pathways &amp; Pulling Points</b> .....	<b>22</b>
<b>Arteries</b> .....	<b>22</b>
<b>Horizontal Transition Points</b> .....	<b>22</b>
<b>Far Point Pulling</b> .....	<b>22</b>
<b>Branches</b> .....	<b>22</b>

Vertical Transition Point .....	22
<b>Selecting Cable Set-Up Area .....</b>	<b>23</b>
Space Considerations.....	23
Critical Angle .....	23
First Horizontal Transition Point .....	23
Slack and Slack Management .....	24
Set-Up Area Selection.....	24
<b>Surveying Cable Pathways .....</b>	<b>25</b>
<b>Cable Delivery Methods &amp; Supports .....</b>	<b>26</b>
Open Delivery Method.....	26
Enclosed Delivery Method .....	26
Confined Delivery Method.....	27
Open Cable Supports .....	27
Installation of J-Hook Supports .....	27
<b>Installing Pull String.....</b>	<b>28</b>
<b>Basic Materials .....</b>	<b>29</b>
Cable Reels.....	29
Cable Boxes .....	29
Cable Memory .....	29
Cable Lubricants .....	29
Colored Electrical Tape.....	29
Conduit .....	29
Innerduct .....	29
<b>Basic Tools .....</b>	<b>30</b>
Scissors .....	30
Cable Cutter .....	30
Fish-Tape.....	30
Anchoring Gun .....	30
Label Tools.....	30
<b>Key Points .....</b>	<b>31</b>
<b>Final Words .....</b>	<b>32</b>