

- Preface p. XIII
- Features of this Edition p. XIII
- Units p. XIII
- Style Conventions p. XIV
- Who Should Read This Book? p. XIV
- How to Use This Book p. XIV
- How to Use the CD p. XVI
- Online Companion p. XVI
- International Extensions p. XVI
- Service Packs p. XVII
- About the Author p. XVII
- Dedication p. XVIII
- Acknowledgements p. XVIII
- Introduction p. 1
- The Benefits of Model-Based Design p. 1
- Benefits to the Architect and Engineer p. 1
- Benefits to the Building Owners p. 2
- Benefits to the Contractor p. 2
- Where Are We Now? p. 3
- Why Should We Spend Time to "Implement" ADT? p. 3
- Let's Get Started p. 10
- Section I Planning p. 11
- Chapter 1 Installation and Configuration p. 13
  - Introduction p. 13
  - ADT Software Installation p. 14
  - Set Up Network Shares p. 14
  - Installation Options (Network or Stand-alone) p. 15
  - Build a Client Deployment p. 16
  - Build a Stand-alone Full Installation p. 26
  - Set Up Network Resources p. 27
  - Customize the ADT Installation p. 29
  - Drawing Setup p. 47
  - Menus and Toolbars p. 49
  - Create an ADT Desktop Icon p. 55
  - Roll Out the Office Standard Installation p. 60
  - Summary p. 61
- Chapter 2 Project and Building Model Structure p. 63
  - Introduction p. 63
  - Parametric Design p. 64
  - Understanding ADT Objects p. 65
  - ADT Object Composition p. 66
  - Understanding the Term "Model" p. 70
  - Sheet Terminology p. 71
  - Object Dimensionality p. 71
  - Architectural Design Approach p. 73
  - Conceptual Design p. 73

- Design Development and Construction Documents p. 74
- Outside--In Design p. 74
- Inside--Out Design p. 75
- Directory and Network Structure p. 75
- Project Folder Naming p. 77
- Sub-Folder Structure p. 78
- Backup Strategy p. 80
- Deciding How to Structure Files p. 80
- The Case for the Separated Building Model p. 81
- ADT Object Characteristics p. 84
- File Naming Conventions p. 86
- XREF Procedure p. 86
- Understanding Files, XREFs and Blocks p. 88
- Block and XREF Usage p. 90
- Understanding XREF Paths p. 94
- Additional Block Creation Considerations p. 101
- Drawing Indexes p. 102
- Preserving XREF Layer Visibility p. 103
- XEDIT System Variable p. 104
- Project Types and File Structures p. 104
- Choose a Pilot Project p. 106
- Small Commercial Building Example p. 107
- Large Commercial Office Tower p. 109
- Institutional Program Driven Projects p. 111
- Hotel and Multi-family Housing p. 112
- Tenant Build-out (Interior Only) Projects p. 114
- Remodeling and Renovation p. 115
- Large Horizontal Plan p. 118
- Small-scale Projects p. 118
- Mass Modeling p. 119
- Project Setup Checklist p. 120
- Summary p. 121
- Chapter 3 CAD Standards Assessment p. 123
- Introduction p. 123
- CAD Standards p. 124
- Plotting p. 125
- Basic Plotting p. 126
- Installing Plotters p. 127
- Taking Stock of Plotting Needs p. 134
- Understanding Plot Style Tables p. 136
- Lineweights p. 137
- Named Versus Color Dependent Plot Style Tables p. 141
- Working with Service Providers p. 143
- Plotting Checklist p. 144
- Existing Cad Standards Assessment p. 144
- Layout (Paper Space) Usage p. 144

- Layer Naming and Usage p. 147
- Colors p. 147
- Linetypes p. 153
- Text p. 155
- Dimension Styles p. 157
- Scale Settings p. 158
- Block Library p. 160
- Detail Library p. 161
- Title Blocks p. 161
- Custom Commands p. 164
- Hatch Libraries p. 164
- Document Sharing Procedures p. 164
- Adt Standards p. 164
- Drawing Setup p. 164
- Template Files p. 165
- Display Settings p. 166
- Object Styles p. 166
- AEC Content p. 166
- Project Standards p. 166
- Agenda for Production Coordination Meeting p. 167
- Training p. 167
- Ongoing Evaluation and Revision p. 169
- Cad Standards Checklist p. 170
- Summary p. 171
- Section II Display p. 173
- Chapter 4 Layers p. 175
- Introduction p. 175
- Layers Versus Display Control Settings p. 176
- Layer Management Dialog Boxes p. 177
- Layer States, Filters, Snapshots and Groups p. 178
- Working With Layer Standards p. 182
- Build Your Office Standard Layer Standard p. 189
- The Final Word on Layer Standards p. 193
- Layer Keys and Layer Key Styles p. 193
- Working With Layer Key Styles p. 193
- The Auto-Import feature p. 196
- Customizing a Layer Key Style p. 204
- Documenting Your Layer Key Styles p. 208
- Updating Existing Drawings p. 208
- Using Non-Keyed Layers p. 210
- The Role of Template Files p. 211
- Beginning a Template File p. 212
- Layers Checklist p. 214
- Summary p. 215
- Chapter 5 The Display System p. 217
- Introduction p. 217

- Exploring the Display System p. 217
- Display Configurations p. 218
- Understanding ADT Defaults p. 219
- In-the-box Templates p. 225
- The Display Manager p. 233
- Understanding Display Reps p. 239
- Determining Which Custom Display Reps to Use p. 242
- XREFs and Display Reps p. 246
- XREF Display Control Checklist p. 249
- Custom Display Reps and Spanning Elements p. 250
- Adding Display Control to the Template p. 256
- Customizing Template Display Reps p. 259
- Revisiting Lineweights p. 262
- The Render Display Configuration p. 264
- The Display System Checklist p. 265
- Summary p. 265
- Section III Content p. 267
- Chapter 6 Schedule Tables and Property Set Definitions p. 269
  - Introduction p. 269
  - Understanding Schedule Table Flow p. 270
  - Planning p. 271
  - Exploring the Sample Schedule Content p. 272
  - Property Set Definitions p. 273
  - Property Set Definition Preparation Checklist p. 278
  - Building Property Sets p. 279
  - Schedule Table Styles p. 286
  - The Value of a Good Naming Convention p. 292
  - Building Model Issues p. 292
  - Generating Schedules in the Same File as the Objects p. 292
  - Generating Schedules in the Composite Model File p. 293
  - Understanding Schedule Tags p. 294
  - Customizing Schedule Tags p. 297
  - CD Resources p. 303
  - Property Set and Schedule Table Checklist p. 303
  - Summary p. 305
- Chapter 7 Dimensioning and Annotation p. 307
  - Introduction p. 307
  - Drawing Setup p. 308
  - Text Annotation and Drawing Notes p. 311
  - Documentation Content p. 316
  - Creating Scale-dependent Annotation p. 321
  - Chases p. 341
  - Elevation Labels p. 348
  - Dimensions p. 351
  - When to Use Associative Dimensions p. 351
  - When to Use Standard AutoCAD Dimensions p. 351

- When to Use AEC Dimensions p. 352
- Variable Scaled Dimensions p. 352
- Dimension Labels p. 356
- Checklist p. 358
- Summary p. 360
- Chapter 8 Content Library p. 361
  - Introduction p. 361
  - Understanding What is Provided By Default p. 361
  - Unit Scaling Issues p. 362
  - Common Features of Design Content p. 365
  - Do We Need the 3D? p. 366
  - Deciding What to Keep and What to Remove p. 368
  - Where to Store the Content Library p. 369
  - Building a Custom Folder Structure p. 369
  - Content Building Considerations p. 371
  - What to Include in the Content File p. 371
  - Naming p. 372
  - Block Orientation p. 373
  - Use of Properties p. 374
  - Alternate Insertion Points p. 374
  - Using AEC Polygons in Content p. 375
  - Content Scaling Options p. 375
  - Property Sets p. 378
  - Building a Piece of Aec Content from Scratch p. 382
  - Building Custom Schedule Tags p. 397
  - Building Content With Varying Levels of Detail p. 398
  - Millwork p. 398
  - Masking Block Content p. 398
  - Checklist p. 399
  - Summary p. 400
- Section IV Styles p. 401
- Chapter 9 AEC Object Styles p. 403
  - Introduction p. 403
  - Getting the Most Out of Style Manager p. 403
  - Filter Style Type p. 404
  - Toggle View p. 405
  - Style Libraries p. 407
  - Building Office Standard Libraries p. 410
  - Developing a Folder Strategy p. 411
  - Look Out for Dependencies p. 412
  - Wall Styles p. 413
  - Physical Model Parameters p. 413
  - Bring the Case to Management p. 414
  - Level of Detail p. 415
  - Endcaps p. 419
  - Naming Conventions p. 419

- Data Parameters p. 420
- Creating Fire Rated Wall Types p. 425
- Graphical Parameters p. 428
- Wall Details p. 429
- Profiles p. 431
- Fenestration Styles p. 432
- Display Reps p. 433
- Coordinating Physical, Graphical and Data Parameters (Creating a Single Hinged Door With Louver Style) p. 435
- Structural Members p. 439
- Display Reps Unique to Structural Members p. 439
- Building a Custom Member Shape p. 440
- The Logical Display Rep p. 445
- Grouped Windows and Doors with Sidelights p. 446
- Checklist p. 449
- Summary p. 451
- Chapter 10 Area Objects and Area Groups p. 453
- Introduction p. 453
- Objectives p. 453
- Basic Area Techniques p. 454
- Working with an Area Object Drawing Template p. 463
- Creating Areas from Walls p. 475
- Area Tags p. 482
- Calculation Modifiers p. 483
- Generating Reports p. 489
- Checklist p. 492
- Summary p. 494
- Chapter 11 Sections and Elevations p. 495
- Introduction p. 495
- 3D Section/Elevation Objects p. 496
- 2D Section/Elevation Objects p. 500
- Uses of the 2D Section/Elevation Object p. 500
- The Bldg Section Line and Bldg Elevation Line p. 501
- Section Line Tags p. 504
- The 2D Section/Elevation Creation Procedure p. 507
- Model Issues (Object Selection) p. 507
- Understanding the Relationship to Sets p. 511
- Optimizing the Model p. 518
- Understanding Styles and Design Rules p. 521
- When to Use Edit/Merge Linework p. 532
- Tracing and Exploding p. 535
- Hatching p. 536
- Wall Types and Wall Sections p. 536
- Batch Update p. 536
- Using Live Sections p. 537
- Checklist p. 537

- Summary p. 538
- Section V Interoperability p. 539
- Chapter 12 Sharing Files with Consultants p. 541
  - Introduction p. 541
  - Understanding Object Enablers p. 541
  - Understanding Proxy Graphics p. 543
  - Turning Proxy Graphics Off p. 543
  - Explode AEC Objects p. 543
  - Using Explode AEC Objects from the Menu p. 543
  - Additional Thoughts on Explode AEC Objects p. 550
  - Using Explode AEC Objects from the Command Line p. 550
  - Final Word p. 558
  - Using Etransmit p. 558
  - Sharing Files with Consultants Checklist p. 562
  - Summary p. 564
- Section VI Conclusion p. 565
  - Conclusion p. 567
  - Pulling It All Together p. 567
  - Create A Big Plan, Take "Baby Steps" to Achieve It p. 567
  - Planning p. 568
  - Templates and Libraries p. 568
  - Interoperability p. 568
  - Publishing Your Standards p. 569
  - Template Checklist p. 569
  - Summary p. 570
  - Index p. 573