CEDIA®

CABLING AND INFRASTRUCTURE TECHNICIAN

CUSTOM ELECTRONIC DESIGN AND INSTALLATION ASSOCIATION
Welcome to CEDIA’s technical education and certification track! The systems integration industry is growing faster than ever, and the demand for qualified personnel in all positions has never been higher. The only way to meet this demand is to build a robust pipeline of entry-level technicians who can go right to work, continue learning and gaining experience, and advance their careers by taking on more responsibilities. Few career paths offer the opportunities found in systems integration, as many technicians eventually step into roles supporting areas such as systems design and engineering, interface design and programming, and project management to name a few. The knowledge and skills gained in this program will prepare you for an exciting career with boundless potential, in an industry that is constantly changing and incorporating new technologies.

This pathway consists of two phases. The first phase covers the knowledge and skills needed for an entry-level systems technician and points to virtually all sectors of the industry. The jobsite fundamentals found in this book focus on work related to the installation of infrastructure that is required to support virtually all integrated systems, both residential and commercial. This includes cabling designed to enable communication (data & telecom), audiovisual signal distribution, security, surveillance, control, and more. The program is designed to prepare learners for success on the job and support them in obtaining the CEDIA Cabling and Infrastructure Technician (CIT) certification, which provides the foundation for all other CEDIA credentials.

You will be introduced to the basics of electricity, construction, documentation, tools, cable characteristics, and work performed by a technician during the installation of the premises cabling (also known as the pre-wire or first fix) as well as the trim-out (second fix) phase of a project. Upon completion, learners will be prepared to do this work safely and efficiently under supervision, as they continue learning and advancing in the industry.

Throughout this book you will find key terms and callouts:
- Pinpointing safety considerations
- Identifying how something will help you be successful
- Defining why a certain concept is especially important to understand

Your next step in this pathway will be found in the second phase of this training. It will build on the fundamentals you learn here and support preparation for the CEDIA Integrated Systems Technician (IST) certification. You will be introduced in more detail to all of the technologies and subsystems that are designed and installed by systems integration companies with a focus on the residential market.
CHAPTER 6 TOOLS AND FASTENERS 117
Hand Tools • Power Tools • Test Equipment • Fasteners

CHAPTER 7 CABLE BASICS AND PREMISES WIRING 163
Wire and Cable Characteristics • Communications Cabling • Structured Cabling/Premises Wiring • Other Cabling and Interconnects • Installing the Cabling Infrastructure

CHAPTER 8 TRIMOUT AND TESTING 207
Cable Preparation • Connectors and Termination • Equipment Installation • Testing • Documentation • Retrofit Basics • Summary • Other Termination Exercises

CHAPTER 9 INTRODUCTION TO SUBSYSTEMS 245
Communication Systems • Audio Video • Equipment Installation • Control Systems • Commonly Integrated Technologies • Other Subsystems

RESOURCES
CEDIA Cabling and Infrastructure Technician (CIT) Certification 265
CEDIA Code of Conduct 272
Glossary 273
Index 317
INDEX

**Numbers**

1/8” (3.5 mm) phone plug terminations, 236
1/4” (6.35 mm) phone plug terminations, 235
3:4:5 rule, 41
4 to 1 rule, 62
21st century, 2, 5–6
25-pair cable, 168, 169
90° drills, 124
110 punch down blocks, 214–215
1990’s, 2, 4

**A**

abbreviations, 26
AC (alternating current), 54
access control, 257
access points, 248
AC circuits, 55
accuracy, 16, 19
AC line quality monitors, 138
acorn nuts, 151, 152
acrylate coating, 174
acute angles, 44
acute triangles, 45
AC voltage, measuring, 131
adjustable coaxial cable jacket and dielectric removal tools, 118
Administration Standard for Telecommunications Infrastructure, 77–78
AHJs (Authorities Having Jurisdiction), 62, 63
alarms, 257
algebra, 42–43
Allen keys, 120
Allen wrenches, 120
alternate (alt) modes, 190
alternating current (AC), 54
alternative energy sources, 260
aluminum, 114
American Institute of Architects (AIA), 10
American Institute of Building Design (AIBD), 10
American Society of Interior Designers (ASID), 10
American Wire Gauge (AWG) Standard, 164–165
ammeters, 130–131, 133
amperage, 52
Ampere, André-Marie, 50
amperes (amps), 41, 50
analog meters, 129–130, 133
analog multimeters, 133
analog signals, 184–185
analog video, 188
anchors
bolt anchors, 154–155
epoxy set anchors, 158
hollow-wall fasteners, 156–157
one-step anchors, 153–154
powder-actuated tools and, 158
screw anchors, 155
self-drilling anchors, 155, 156
angles, 44
annealing, 166
ANSI/CTA/CEDIA-2030-A Multi-Room Audio Cabling Standard, 78
ANSI-J-STD-710 (CTA/CEDIA/AVIXA-2039) Video and Control Architectural Drawing Symbols Standard, 30, 78
ANSI/TIA-568.1-D Commercial Building Telecommunications Cabling, 75
ANSI/TIA-568.2-D Balanced Twisted-Pair Telecommunications Cabling and Components, 75
ANSI/TIA-568.3-D Optical Fiber Cabling Components, 76
ANSI/TIA-568.4-D Broadband Coaxial Cabling and Components Standard, 77
ARC (audio return channel), 190
architects, 10
architectural drawings, 26–29
area (A), 44, 46
asbestos, 72
as-built drawings, 35, 38
ASID (American Society of Interior Designers), 10
assets, 20
ASTM / SAE bolts, 148
attention to detail, 20
attenuation, 172, 173, 177–178
attic ceiling, 97
attic insulation, 97
attics, 106
attire, recommended, 22
attitudes, 22
audible acknowledgment feature, 134
AudioAccess, 4
audio cable, 183–186
audio frequency dividing networks (crossovers), 58
audio return channel (ARC), 190
audio video, 249–252
Audio Video Interiors, 4
auger bits, 99, 124
Australian CEDIA office, 4–5
Australian dimensional lumber, 95
Australian electrical codes, 63
Australian safety codes, 73
Authorities Having Jurisdiction (AHJs), 62, 63
automatic off, 134
autorange mode, 134
AV floor plans, 30
AV room layout drawings, 33, 34
AWG (American Wire Gauge) Standard, 164–165

**B**

backbone cabling, 178
backboxes, 83, 111–112
balanced analog signals, 185

317
Balanced Twisted-Pair Telecommunications Cabling and Components, 75
balloon framing, 106, 107
baluns, 164, 187
banana plugs, 220
bandwidth categories, 169
baseband video, 186–187
basements, 105
base plates, 106
base terminals, 59
beams, 102
behavior on jobsites, 21
bend radius, 193, 194
bends, 90
best practices, 17, 62
biasing, 59
binding posts, 220
biometric access, 246
biometric access devices, 257
bipolar junction transistors (BJTs), 59
black electrical tape, 74, 123
black outs, 138
bleeding, 71
blind rivets, 158
bloodborne pathogens, 62, 71
blown insulation, 112, 113
blueboard, 110
blueprints, 29
blue-white pair, 168
BNC connector terminations, 239–241
bolt anchors, 154–155
bolts, 144, 147–151, 152
boots, 22
bottom plates, 96
box cutters, 121
boxes, 99–100
boxes in concrete, 84
braided shield, 167
brick, 114
Broadband Coaxial Cabling and Components Standard, 77
broadband providers, 246
broken bones, 71
broken lines, 43
brown outs, 138
buffers, 176
builders, 10–11
building boards, 109–110
building codes, 62
burns, 71
bushings, 90
business owners, 13
button screws, 152
butt sets, 136
bypass capacitors, 57

cable, 164, 166–167. See also communications cable
cable baskets, 201
cable caddies, 195
cable construction, 167–168
cable cutters, 118, 208
cable labelers, 209
cable lubricants, 201
cable paths, 196–197
cable preparation, 208–209
cable schedules, 32
cable staples, 159
cable testing tools, 141–142
cable TV providers, 246
cabling, 87–88
cabling and infrastructure technicians (CITs), 12
cabling infrastructure, 246
cabling infrastructure installation
electrical codes and low voltage cable, 201–203
flex life, 194
general guidelines, 192–193
masonry-built techniques, 199–202
procedures, 194
pull tension and bend radius, 193, 194
wood frame techniques, 194–198
cabling pathways, 84–87
CAC (Ceiling Attenuation Class), 91
Canada safety codes, 73
Canadian Center for Occupational Health and Safety, 73
capacitance, 47, 173
capacitors, 56–57
cap nuts, 152
cap screws, 149
carbon monoxide detectors, 257
career opportunities, 12–13
castle nuts, 151, 152
category cable, 169, 178
CCA (chromated copper arsenate), 109
CD (controlled density) gypsum board, 110
CEA/CEDIA-863-B Connection Color Codes for Home Theater, 78
CEDIA (Custom Electronic Design and Installation Association), 4, 6
CEDIA Code of Ethics, 18
CEDIA EXPO, 4–5, 6
CEDIA University, 5
Ceiling Attenuation Class (CAC), 91
ceiling board, 110
ceiling hangers, 93
ceiling joists, 97
ceiling panels, 91
ceiling projector lifts, 253
cellular metal floor raceway systems, 85
cement board, 110
center lines, 29
centi, 48
central control panels, 257
central dimmer panels, 256
centralized HVAC controllers, 258
central vacuum systems, 261
certification, 6
certification testers, 143
certification testing, 142, 224
Index

Index

change orders, 16, 36–37
characteristic impedance, 172
chisels, 74, 123
chromated copper arsenate (CCA), 109
circles, 43–44
circuit schematics, 33
circumference (C), 44, 46
CIs (cabling and infrastructure technicians), 12
cladding, 173, 174
clamp-on ammeters, 131
classes of administration, 78
classes of cable, 202
classes of threads, 145–146
cleaning conduit, 199
cleanliness, 22
client expectations, 21–22
client privacy, 38
clients, 10
closed circuits, 53
CMR (Common Mode Rejection), 185
CMRR (Common Mode Rejection Ratio), 185
CMUs (concrete masonry units), 83
CO2 fishing systems, 200
coarse thread screws, 151
coaxial cable (coax), 171–173
 coaxial cable jacket and dielectric removal tools, 118, 119
 coaxial cable run testing, 142
 coaxial RCA terminations, 241–242
Code of Ethics, 18
Code of Practice for Electrical Wiring Installations, 63
codes, 61, 62–63
collector terminals, 59
color coding
  multiconductor control cable, 191
  twisted pair cable, 168–169
Commercial Building Telecommunications Cabling, 75
commercial environments, 178–181
Common Mode Rejection (CMR), 185
Common Mode Rejection Ratio (CMRR), 185
communication, 18, 22
communications cable
  coaxial, 171–173
  fiber optic cable. See separate entry
  qualification and certification of, 142–143
  shielded twisted pair (STP) cable, 170–171
  test equipment for, 225–226
  twisted pair cable, 168–169
  unshielded twisted pair (UTP) cable, 170
communications systems, 246–247
company policies, 21
company types, 7–9
company vehicles, 20
completion, construction, 24
component video (television component), 188
c composite video, 188
c composite wood, 108
c compression fittings, 119
c compression tools, 119
compression-type connector terminations, 211–213
concrete blocks, 83
concrete composition, 83
controllables, 26–29
core grade, 174
core hitches, 201
cores, fiber optic, 174
counters, 136
countersunk washers, 151
coupling capacitors, 57
coworkers, 23
CPS (cycles per second), 54
crawl spaces, 105
crew leaders, 12
crimping tool, 75, 123
crimp on and compression terminations, 239–242
crimp-on splices, 210–211
crisscrossing, 58
critical path items, 37
crossovers (audio frequency dividing networks), 58
Index

Index
CABLING AND INFRASTRUCTURE TECHNICIAN

CTA/CEDIA-CEB17-A R-2018 Floor-to-ceiling Guide for Residential Speaker Systems, 78

cured concrete, 83
current, 50, 53
curved lines, 43
curved TVs, 251
Custom Electronic Design and Installation Association (CEDIA), 4, 6
customer satisfaction, 16
customization, 2
custom retailers, 8
cut-in boxes, 111
cutting plane lines, 29
cycles per second (CPS), 54

dangerous voltage indication, 134
datacom, 181
data networks, 247
DC (direct current), 53, 54
DC circuits, 55
DDC (display data channel), 190
DDWG (Digital Display Working Group), 188
deci, 48
deck screws, 150
degrees, 44
Department of Employment and Labour, 73
design, construction, 24
designers, 12–13
design worksheets, 24
detail drawings, 28, 29
detailed schematic diagrams, 32, 33
details, 20
diameter, 44
dielectric, 164
digital audio, 186
Digital Display Working Group (DDWG), 188
digital multimeters (DMMs), 129–130, 134–135, 227
digital video, 188–190
digital visual interface (DVI), 188–189
dimensional lumber, 95, 108
dimension lines, 29
dimmers, 256
diodes, 59
direct burial cable, 86
direct current (DC), 53, 54
direct-hung concealed grids, 92–93
direct-hung exposed grids, 92
display data channel (DDC), 190
DisplayPort, 190
distributed audio and video, 246
distributed video, 250
distributors, 8
DIY devices, 260, 261
DMMs (digital multimeters), 129–130, 134–135, 227
docks plank, 85, 86
documentation, 15

earmuffs, 70
earplugs, 70
ear protection, 70
EDID (extended display information data), 190
E-EDID (enhanced EDID), 190
efficiency, 16, 20
EIA (Electronic Industry Alliance) racking system, 253
electrical charge, 47
electrical circuits, 53
electrical codes, 62, 201–203
Electrical Installations Design Code, 63
Electrical Installations code, 63
electrical metallic tubing (EMT), 89
electrical nonmetallic tubing (ENT), 89
electrical plans, 28
electrical safety, 66
electrical tape, 74, 123
electricity, 50
alternating current (AC), 54
direct current (DC), 53, 54
electrical circuits and, 53
introduction to, 50
Ohm’s Law, 51–52
resistance vs. impedance, 55
units of, 50–51
water analogy, 52–53
electric shock, 72
electromagnetic field (EMF), 58
electromotive force, 131–132
electronic components, 56–59
Electronic Industry Alliance (EIA) racking system, 253
electronic subsystems
audio video, 249–252
central vacuum systems, 261
commonly integrated technologies, 256–258
communications systems, 246–247, 248
control systems, 255
energy management/monitoring and alternative energy sources, 260
equipment installation, 253–254
IoT/DIY devices, 260, 261
irrigation systems, 258
pools and spas, 259
water/plumbing, 259
electronic systems designers, 12–13
electronic systems industry, 1
electrons, 50
elevations, 27–28
EMF (electromagnetic field), 58
emitter terminals, 59
EMT (electrical metallic tubing), 89
ergy, 47
energy management, 260
energy monitoring sensors, 260
engineered joists, 197
engineered lumber, 108
engineering documents, 15
engineers, 13
English system, 47, 48–49
enhanced EDID (E-EDID), 190
ENT (electrical nonmetallic tubing), 89
entrance facilities, 178
enviroboard, 110
epoxy set anchors, 158
equilateral triangles, 45
equipment-grounding conductor programs, 128
equipment installation, 221–222, 253–254
equipment rack drawings, 33
equipment racking systems, 253–254
equipment rooms, 178
ethernet system analyzers, 143
ethics, 16
Ethics Committee, 18
Euroblock connectors, 210, 220
European Union safety codes, 73
expectations, 18, 21–22
extended display information data (EDID), 190
extension cords, 66
extension ladder safety, 66
extension lines, 29
exterior building/house elevations, 27
exterior finishes, 113–114
external lock washers, 151
external washers, 152
eye injuries, 71–72
eye protection, 65
F
fall protection, 67
farads (f), 56
fasteners. See non-threaded fasteners and threaded fasteners
fastener use, 159–160
"F" connectors, 211–213
FDMI (Flat Display Mounting Interface) standard, 78
fender washers, 151, 152
FEP (fluorinated ethylene propylene), 167
FETs (field effect transistors), 59
fiberboard, 109
fiberglass, 106
fiberglass batt insulation, 112–113
fiberglass fish tape, 200
fiberglass ladders, 122
fiber optic cable, 164
buffers and jackets, 176
classifications, 174–175
construction of, 173–174
cores, 174
installation considerations, 176–177
mode of operation, 175–176
signal loss, 177–178
use of, 173
fiber optic connectors and terminations, 219
fiber optic structured cabling, 180
fiber to the premises (FTTP), 247
field effect transistors (FETs), 59
file updates, 38
filled walls, 83–84
fill factor, 90
filter capacitors, 57
finished nuts, 151
finite lines, 43
fire block, 98
fire clips, 92
fire-resistant (Type X) gypsum, 110
first aid, 68–73
first fix. See prewire and premises wiring
fish tapes, 122, 200, 230
flex life, 194
fixed coaxial cable jacket and dielectric removal tools, 118
fixed wireless broadband, 247
flange nuts, 152
Flat Display Mounting Interface (FDMI) standard, 78
flat head screws, 152
flat panel mounts, 251
flat panel TVs, 251
flat washers, 151, 152
flexible cord sets, 66
flexible metal conduit (FMC), 89–90
flex life, 194
floor joists, 96, 106
floor plans, 27, 30, 31
Floor-to-ceiling Guide for Residential Speaker Systems, 78
flow charts, 24, 25
fluorinated ethylene propylene (FEP), 167
FMC (flexible metal conduit), 89–90
foil, 113
foil-backed gypsum board, 110
foil scrim kraft, 113
foil twisted pair (FTP) cable. See shielded twisted pair (STP) cable
forward biasing, 59
foundations, 105
founders of CEDIA, 3–4
four-conductor cable, 184
fox and hound. See tone generators (toners)
framing impact on wiring, 107
framing members, 96–98
frequency, 47, 54
frequency meters, 136
FTTP (fiber to the premises), 247
functionality statements, 34
functionality worksheets, 24

G
Gantt Charts, 37
general contractors, 10–11
general purpose cabling, 227
geometric points, 43
geometry, 43–46
GFClS (ground-fault circuit-interrupters), 128
glass fiber, 174
glass wool. See fiberglass batt insulation
glue-laminated lumber (glulam), 102, 108
graded-index multimode fiber, 175
grades of outlets, 181–182
grades of plywood, 109
greenboard, 110
green state of concrete, 83
ground-fault circuit-interrupter (GFClS), 128
grouping symbols, 42
guidelines, 29
gypsum board, 82, 110–111, 112
gypsum board applications, 221
gypsum board ceilings, 93
gypsum board saw, 75

H
hammer drills, 124
hammers, 74, 121, 123
hand-held remotes, 255
hand tools
cable cutters, 118
coaxial cable jacket and dielectric removal tools, 118, 119
compression tools, 119
drywall saws, 120, 121
fish tapes, 122
hammers, 121
hex keys, 120
hex nut drivers, 120
insulation displacement connector (IDC) punch-down tools, 119
linesman pliers, 120, 121
modular plug crimp tools, 119, 120
pliers, 119, 120
push/pull rods, 122
short levels, 121
staples, 121
tape measures, 122
utility knives/box cutters, 121
UTP jacket removal tools, 118, 119
wire insulation removal tools, 118
hardboard, 109–110
hard hats, 67
harnesses, 123
hazardous materials, 72
HDCP (high-bandwidth digital content protection), 190
HDMI (high-definition multimedia interface), 189–190
HDMI extenders, 250
HDMI interconnects, 250
HDMI standard, 78
HDO (high density overlay plywood), 110
headers, 97, 98, 102
head protection, 65
Health and Safety at Work Act, 73
Health and Safety Authority, 73
health threats, 65
hearing conservation programs, 70
hearing loss, 70
heat exhaustion, 69
heating, ventilation, and air conditioning (HVAC), 258
heat stroke, 69
hecto, 48
Henry (H), 58
Henry, Joseph, 58
Hertz (Hz), 54
Hertz, Heinrich, 54
hex head bolts, 152
hex jam nuts, 152
hex keys, 120
hex nut drivers, 120
hex nuts, 152
hex screws, 152
hex wrenches, 120
hidden lines, 29
hidden speakers, 249
Hi-Fi shops, 2
high-bandwidth digital content protection (HDCP), 190
high definition, 2
high-definition multimedia interface (HDMI), 189–190
high-density fiberboard, 109–110
high density overlay plywood (HDO), 110
high-frequency capacitors, 57
high-frequency inductors, 58
high speed HDMI cables, 189
high-velocity powder-actuated tools, 158
high-voltage, 138
hold clips, 92
hole saws, 124, 125
holes in joists, 100, 101
Index

hole sizes, 88, 98–99  
hollow-core plank, 86, 87  
hollow-wall fasteners, 156–157  
home cinemas, 251–252  
home networks, 2  
homeowners, 10  
home theaters, 2, 10  
hook and loop straps, 159  
horizontal cabling, 178  
hot plug detect (HPD), 190  
HVAC (heating, ventilation, and air conditioning), 258  
hypotenuses, 45

I  
IBC (International Building Code), 99  
I-beam joists, 108  
IDC (Interior Designers of Canada), 10  
IDC (insulation displacement connector) punch-down tools, 119  
IDCs (insulation displacement connectors), 208  
IEC 60228 standard, 164, 165  
IET Wiring Regulations, 63  
IIDA (International Interior Design Association), 10  
impedance, 55, 172  
impedance matching volume controls, 222–223  
implementation, construction, 24  
in-ceiling speakers, 249  
India electrical codes, 63  
inductance, 47, 58, 173  
inductive noise amplifiers, 135, 227  
inductors, 58, 59  
industry standards. See standards  
infinite lines, 43  
innerduct, 89  
insulation, 112–113  
insulation displacement connector (IDC) punch-down tools, 119  
insulation displacement connectors (IDCs), 208  
integrated systems control, 255  
integrated technologies, 256–258  
inversion, 2  
integrity, 18  
interconnects, 183  
interior designers, 10  
Interior Designers of Canada (IDC), 10  
interior elevations, 28  
internal-external washers, 152  
internal lock washers, 151  
internal washers, 152  
International Building Code (IBC), 99  
International Electrotechnical Commission, 63  
International Interior Design Association (IIDA), 10  
International Residential Code, 63  
internet, 5  
internet service providers (ISPs), 247  
interview worksheets, 24  
intrusion, minimizing, 22  
invisible lines, 29

in-wall conduit, 88–90  
in-wall impedance matching volume controls, 249  
in-wall keypads, 249  
in-wall speakers, 249  
IoT devices, 260, 261  
IP cameras, 257  
IR connecting blocks, 255  
IR remotes, 2  
irrigation systems, 258  
ISO metric screw threads, 144–145  
isosceles triangles, 45  
ISPs (internet service providers), 247

J  
J 429c: Mechanical and Quality Requirements for Threaded  
Fasteners, 148  
jab-saws, 75, 120, 121, 123  
jacket removal tools, 208  
jackets, 167, 176  
jack studs, 97, 98, 103  
jam nuts, 151  
J-boxes, 195  
jobsite behavior, 21  
jobsite safety, 64–68  
joists, 100–101

K  
kilo, 48  
king studs, 97, 98  
kraft paper, 113

L  
labeling structured cable, 182–183  
label makers, 126, 127  
ladders, 122  
ladder safety, 66  
lag screws, 149, 150  
lam beams, 197  
laminated beams, 197  
laminated strand lumber (LSL), 108  
laminated veneer lumber (LVL), 108  
LAN cable testers, 143  
LANs (local area networks), 181  
LAN testers, 226  
lanyards, 123  
laser levels, 126, 127  
lathe and plaster construction, 125  
lead-based paint, 72  
lead-lined gypsum board, 110  
lead technicians, 12  
LED smart lights, 261  
length, 47  
levels, 121
levels of cable testing, 223–224
levels with templates, 230
liability, 65
lighting, 256
lighting keypads, 256
line level audio cable, 183
lineman pliers, 74, 123
lineman’s test sets, 136
lines, geometric, 43, 44
linesman pliers, 120, 121
LNB (low noise blockdown) converters, 166
load-bearing, 164
load-bearing studs, 82, 88, 98–99
load-bearing walls, 103–104, 196
load capacity of threaded fasteners, 146–147
load ratings, 246
loads, 55
local area networks (LANs), 181
lock washers, 151, 152
long term success, 17
long-term tensile loads, 176
low-frequency capacitors, 57
low-frequency inductors, 58
low noise blockdown (LNB) converters, 166
low-velocity powder-actuated tools, 158
low-voltage, 138
low-voltage cables, 166
LSL (laminated strand lumber), 108
lubricants, 201
LVL (laminated verneer lumber), 108
machine screw nuts, 152
magnetic fields, 57
magnetic reed switches, 257
magnetic sensors, 257
man-made wood, 108
manufacturers, 9
manufacturer’s reps, 8
manufacturer training, 8
masonry-built cabling techniques, 199–201
masonry construction
cabling pathways, 84–87
conduit, 88–90
fundamentals of, 83–84
gypsum board ceilings, 93
metal studs and cabling considerations, 87–88
pole raceway systems, 91
roofs, 93–94
sizing raceways, 90
surface-mounted raceways, 90
suspended ceiling systems, 91–93
uses of, 82
vs wood frame, 82
mass, 47
material safety data sheets (MSDSs), 71
mathematics
algebra, 42–43
common functions, 42
graphs, 43–46
measurements and conversions, 47–49
mating plugs, 66, 67
MDF (medium-density fiberboard), 109
MDO (medium density overlay plywood), 110
MDUs (multi-dwelling units), 82
mechanical plans, 28–29
Mechanical and Quality Requirements for Threaded Fasteners, 148
Mechanical Properties of Fasteners Made of Carbon Steel and Alloy Steel, 147
media rooms, 251–252
medical emergencies, 68–73
medium-density fiberboard (MDF), 109
medium density overlay plywood (MDO), 110
mega, 48
metal fish tapes, 200
metal ladders, 122
metallic surface mounted raceways, 90
metal pan systems, 92
metal studs, 82, 87–88
metric bolts, 147–148
metric system, 47–48
Mexican electrical codes, 63
Mexican Health and Safety, 73
Mexican safety codes, 73
Mexico’s Industrial Health and Safety Regulations, 73
mice. See conduit pistons
micro, 48
microphone level audio cable, 183
milli, 48
mineral fiber, 106
mineral fiberboards, 110
minimal intrusion, 22
MMF (multi-mode fiber), 175–176, 180
mobile devices, 255, 260
modems, 248
modular connectors, 215–216
modular jacks, 208
modular jack terminations, 216–217
modular plug crimp tools, 119, 120
modular plug terminations, 217–218
modulated (RF) video signals, 186
mold-resistant, paperless gypsum board, 110
molly bolts, 157
mortar, 83
motion detectors, 257
motorization, 253
motorized pool covers, 259
motorized projection screens, 253
mounting devices, 91
MSDs (material safety data sheets), 71
multiconductor control cable, 191
multi-dwelling units (MDUs), 82
multimeters, 117, 129–130
multi-mode, 174
multi-mode fiber (MMF), 175–176, 180
multimode optical fiber, 175
multiplier resistors, 132
multi-room audio, 2
Multi-Room Audio Cabling Standard, 78
multi-tenant structures, 178–181
multi-tools, 126
multi-user telecommunications outlet assembly (MUTOA), 179
multi-zone controllers/amplifiers, 249
mutual induction, 57

N
nail guards, 99
nail-in anchors, 153, 154
nails, 158
National Association of Home Builders (NAHB), 11
National Association of the Remodeling Industry (NARI), 11
National Electrical Code, 63
network cable analyzers, 143
networked media systems, 261
networking, 5–6
network video recorders (NVRs), 257
New Zealand electrical codes, 63
nogging, 98
noise, 186
noise levels, 70
noise reduction coefficient (NRC), 91
nominal (maximum) outer diameter, 117
non-load-bearing, 82
non-load-bearing studs, 88, 98–99
non-load-bearing walls, 103–104, 196
non-metallic surface mounted raceways, 90
non-threaded fasteners, 158–159
North American dimensional lumber, 95
Northern Ireland safety codes, 73
notches in joists, 100, 101
NRC (noise reduction coefficient), 91
N-type material, 59
nucleus, 50
nuts, 144, 151, 152
NVRs (network video recorders), 257

O
object lines, 29
obtuse angles, 44
obtuse triangles, 45
occupancy sensors, 256
Occupational Safety and Health Administration, 73
off-air television, 247
Official Mexican Norms, 73
Ohm, Georg Simon, 51
ohmmeters, 132–133
Ohms (Ω), 41, 51, 52, 56
Ohm’s Law, 51–52
OSHA, 73
Omega (Ω), 51
OM (optical multi-mode) fiber, 175–176
one-step anchors, 153–154
open circuits, 53
optical fiber cabling components, 76
optical multi-mode (OM) fiber, 175–176
optical power meters, 177, 226
optical time-domain reflectometer (OTDR), 178
oriented strand board (OSB), 108, 110
oscillating tools, 126
oscilloscopes, 137, 138
OTDR (optical time-domain reflectometer), 178
outlet hardware, 221
outdoor access points, 248
outdoor in-ground subwoofers, 249
outdoor speakers, 249
outlines, 29
outside service providers, 246–247
oval screws, 152
overload display, 134
owners, 13
oxygen content, 73

P
packing blankets, 22
paddle bits, 124, 125
pan screws, 152
pan tools, 92
parallel-connected capacitors, 57
parallel inductors, 58, 59
parallel lines, 43
parallel strand lumber (PSL), 108
particleboard, 110
partition walls. See non-load-bearing walls
patching gypsum board, 112
P designated cables, 202
perpendicular lines, 43
personal protective equipment (PPE), 62, 67
Phillips screws, 152
phone calls, 22
phono plug (RCA) terminations, 236–237
photovoltaic solar systems, 260
Pi, 44
pig tail terminations, 210–211
pins, 158
pin-to-pair protocols, 76
plaster board. See gypsum board
plaster construction, 125
plaster cutting bits, 125
plastic-clad silica, 174
plastic expansion anchors, 157
plastic optical fiber (POF), 175
plastic state of concrete, 83
platform framing, 106–107
plenum, 92, 164
pliers, 119, 120
plot plans, 26
plugs, 66, 67
plumbing, 259
plywood, 108, 109
PMI (Project Management Institute), 39
PoE injectors, 248
POF (plastic optical fiber), 175
point of demarcation, 246
pole raceway systems, 91
policies, company, 21
pools, 259
POs (purchase orders), 37
post-tensioned concrete, 86
powder-actuated fasteners, 158
powder-actuated nailers, 126
power, 47, 51
power consumption, 51
power tools, 124–128
power tool safety, 66
PPE (personal protective equipment), 62, 67
pre-cast concrete planks, 85, 86
pre-engineered joists, 101
premises wiring, 163, 178–183
premium high speed HDMI cables, 189
pressure, 47
pressure-sensing devices, 259
pressure-treated lumber, 108–109
pressure treating, 109
prewire, 20, 32
pre-wire phase. See premises wiring
probe, 135
professionalism, 15
business professionalism, 17–18
importance of, 16–17
jobsite professionalism, 19–23
professionals, 15
profitability, 21
project documentation. See documentation
projection ceiling mounts, 251
projection screens, 251
project management, 16, 39
Project Management Body of Knowledge, 39
project management documents, 26, 35–37
Project Management Institute (PMI), 39
project managers, 13
project needs assessments, 24–25
project scope. See scope of work
project wrap up documents, 37–38
proof load, 118, 147
proposals, 34
protection of assets, 20
PSL (parallel strand lumber), 108
P-type material, 59
pulling grips, 201
pull lines, 200–201
pull points, 90
pull ropes, 201
pull tension, 193, 194
punch-down tools, 119
punching holes, 88
punch lists, 37–38
purchase orders (POs), 37
push/pull rods, 122
PVC, 89
PVC conduit, 85
Pythagorean Theorem, 45, 46
Q
qualification testers, 142–143
qualification testing, 142, 224
R
raceways, 85, 90
radius, 44
rafters, 97, 101
R&D (research and development), 9
ratcheted tools, 119
RCA (phono plug) terminations, 236–237
RCD (residual current device), 128
RCPs (reflected ceiling plans), 27
R designated cables, 202
reactance, 55
real time analyzers (RTAs), 140–141
receptacles, 66, 67
reciprocating saws, 125
recommended practices, 61, 62, 79
record keeping, 73
recovery position, 72
rectangle equations, 46
rectangular volume, 46
referrals, 16
reflected ceiling plans (RCPs), 27
regional education events, 4
regular nuts, 151
repeaters, 190
Republic of Ireland safety codes, 73
requirements, construction, 24
research and development (R&D), 9
residential cabling, 181–183
residential construction, 106–107
residential systems, 2–3
residential systems integrators, 3
residual current device (RCD), 128
resistance, 47, 52, 53, 55, 164
resistance measurements, 132
resistive loads, 52
resistors, 52, 56
respect for property and people, 21, 22
respiratory equipment, 67
respiratory hazards, 72
retrofit basics, 229–230
Index

327

retro-fit boxes, 111–112
retrofits, 111
reverse biasing, 59
RF meters, 226
RF spectrum analyzers, 139
RF test equipment, 138–139
RF video, 187
RGBhv cable, 188
right-angle drills, 124
right angles, 41, 44
right triangles, 45
rigid metal conduit (RMC), 89
rigid non-metallic conduit (PVC), 89
ring, 168
rock type outdoor speakers, 249
roofing, 113
roofing systems, 101–102
roof mounting, 93–94
roofs, 93–94
roof wiring, 94
rotary tools, 125, 126
rough-in. See premises wiring
rough-in boxes, 195
rough-in schedule. See prewire
round screws, 152
routers, 248
RTAs (real time analyzers), 140–141
rubber-insulated gloves, 127
Russian electrical codes, 63

S

SAE (Society of Automotive Engineers), 148
SAE / ASTM bolts, 148
safety
codes and standards, 61, 62–63, 73, 75–78
first aid and medical emergencies, 68–73
jobsites and, 64–68
recommended practices, 61, 62, 79
tools and, 74–75, 123, 127–128
safety data sheets (SDSs), 71
safety glasses, 67
safety threats, 65
Safe Work Australia safety codes, 73
sales, 13
sales orders, 35, 36
Sammy anchors, 153
satellite radio, 248
satellite TV providers, 247
scaffolds, 123
scalene triangles, 45
schedules, 16
schematics, 16
scope creep, 18
scope of work, 16, 18, 34
Scotland safety codes, 73
screened twisted pair (ScTP) cable. See shielded twisted pair (STP) cable
screw anchors, 155
screw-down terminations, 243–244
screwdrivers, 74, 123
screw-on “F” connectors, 211
screws, 144, 148–150, 152
section drawings, 28
section lines, 29
securing cables, 197–198
security systems, 257
self-drilling anchors, 155, 156
self-feeding large diameter wood boring bits, 125
self-locking nuts, 151
self-threading anchors, 157
self-threading fasteners, 150
semi-finished nuts, 151
series-connected capacitors, 57
series inductors, 58, 59
service providers, 246–247
set screws, 149
severe bleeding, 71
shades, 256
Shanghai CEDIA office, 5
sheet metal screws, 150
sheetrock. See gypsum board
sheetrock saws, 75, 230
shielded twisted pair (STP) cable, 170–171, 193
shielding, 167
shoe covers, 22
shop vacuums, 127, 200
short circuits (shorts), 53
short levels, 121
short-term tensile loads, 176
shut-offs, water, 259
signal losses, 177–178
signal strength meters, 139
sill plates, 96, 106
single mode, 174
single-mode fiber (SMF), 175, 180
single-mode optical fiber, 175
sink, 190
site elevations, 26
site plans, 26
sizing raceways, 90
sleeve anchors, 153
slotted nuts, 151
smart thermostats, 258, 261
SMF (single-mode fiber), 175, 180
smoke detectors, 257
smoking, 23
SO 898 - Mechanical Properties of Fasteners Made of Carbon Steel and Alloy Steel, 147
Society of Automotive Engineers (SAE), 148
softboard, 109
soldering fundamentals, 232–235
soldering irons, 75, 123, 126
solder-on terminations
1/8” (3.5 mm) phone plug terminations, 236
1/4” (6.35 mm) phone plug terminations, 235
solder-on terminations (continued)
- phono plug (RCA) terminations, 236–237
- soldering fundamentals, 232–235
- XLR plug terminations, 237–238
- sole plates, 96
- soundboard, 110
- sound pressure level (SPL), 139
- sound transmission, 104–105
- sound transmission class (STC) rating, 104–105
- source devices, 249
- sources, 190
- South African electrical codes, 63
- South African National Standard, 63
- South African safety codes, 73
- speaker cable terminations, 219–220
- speaker installation, 221–222
- speaker level audio cable, 184
- SpeakON plug terminations, 243–244
- spear bits, 124, 125
- specialists, 9
- specialized services, 9
- spikes, 138
- spinal injuries, 71
- spiral wrap, 167
- SPL (sound pressure level), 139
- splines, 93
- split-ring lock washers, 151
- SPL meters, 139–140
- spray foam insulation, 113
- spring toggle anchors, 156, 157
- square nuts, 152
- squares, 46
- stakeholders, 10–11, 16
- standard HDMI cables, 189
- standards, 61, 62–63, 75–80
- staples, 121
- statements of substantial completion, 34
- static loads, 117
- STC (sound transmission class) rating, 104–105
- steel conduit, 85
- steel construction vs wood frame, 82
- steel decking, 86
- steel I-beams, 197
- step bits, 124, 125
- step-down transformers, 57
- step-index fiber, 175
- step-index multimode fiber, 175
- step ladder safety, 66
- step-up transformers, 57
- Stevens, Chris, 4
- stick built framing. See wood frame construction
- stick framing. See platform framing
- storage, document and accessory, 38
- STP (shielded twisted pair) cable, 170–171, 193
- straight lines, 44
- stranded wire, 166
- stranding, 166
- strap toggle anchors, 156, 157
- strike anchors, 154
- structured cabling. See premises wiring
- stud bolts, 149
- stud finders, 127, 230
- stud finding tools, 111
- studs, 96, 97, 98–100
- subcontractor agreements, 35
- sub-flooring, 103
- success in workplaces, 23
- suffixes of cable, 202
- supporting cables, 193
- surface-mounted raceways, 90
- surges, voltage, 138
- surveillance systems, 257
- suspended ceiling systems, 91–93
- switches, 248
- symbols, 30, 31
- system block diagrams, 30, 31
- system commissioning, 37, 38
- system design and engineering documents, 25, 30–33
- system keypads, 257
- systems automation, 246
- systems engineers, 13
- systems integration, 2, 246
- systems integrators, 7

T
T-568A, 76
T-568B, 76
tables, 255
tape measures, 122
task dependencies, 37
teammates, 23
Teflon, 167
telecom, 180–181
telecommunication companies, 246
telecommunication Industry Association (TIA), 170
telecommunication infrastructure standards, 75–78
Telecommunications Pathways and Spaces, 77
telecommunications rooms, 178
television component video, 188
temperature, 47
tensile loads, 176
tensile strengths, 118
tensile strength of threaded fasteners, 146–147
terminations and connectors. See connectors and
terminations
terrestrial radio, 247
test equipment, 20
AC line quality monitors, 138
ammeters, 130–131
analog multimeters, 133
cable testing tools, 141–142
certification testers, 143
Index

coaxial cable run testers, 142
documentation, 228
digital multimeters (DMMs), 134–135
documentation, 136
frequency meters/counters, 136
lineman's test sets, 136
multimeters, 129–130
network cable analyzers, 143
ohmmeters, 132–133
oscilloscopes, 137
qualification testers, 142–143
real time analyzers (RTAs), 140–141
RF spectrum analyzers, 139
RF test equipment, 138–139
signal strength meters, 139
SPL meters, 139–140
tone generator and inductive noise amplifier, 135, 136
twisted pair cable testers, 142
voice / data / video (VDV) verification testers, 142
voltmeters, 130, 131–132, 133
testing cables
best practices for, 227–228
communications cabling, 225–226
documentation, 228
general purpose cabling, 227
levels of testing, 223–224
thread classes, 145–146
thread-cutting screws, 150
thread density, 118
threaded fasteners
bolts and screws, 148–150
categorization of, 144–146
load capacity and tensile strength, 146–147
SAE / ASTM bolts, 148
tightening, 151–152
US bolts, 147
thread pitch, 118
threads per inch (TPI), 145
threats to health and safety, 65
TIA (Telecommunication Industry Association), 170
TIA-568 standard, 75–77, 179
TIA-569-E telecommunications pathways and spaces, 77
TIA-570-D standard, 77, 181, 182
TIA-606-C Administration Standard for Telecommunications Infrastructure, 77–78, 182
tight-buffered optical fiber, 176
tightening threaded fasteners, 151–152
timber frame construction. See wood frame construction
timeliness, 21
tip, 168
toggle type anchors, 156, 157
tone generators (toners), 135, 136, 208, 227
tools
appropriate and inappropriate uses of, 123
hand tools. See separate entry
harnesses, 123
ladders, 122
lanyards, 123
power tools, 124–128
protection of, 20
safety and, 66, 74–75
scaffolds, 123
test equipment. See separate entry
top plates, 96
torque, 152
torx screws, 152
TPI (threads per inch), 145
trackers, 135
tracks, 135
trusses, 101–102
truss screws, 152
TV lift in cabinets, 253
twist bits, 124, 125
twisted pair cable
audio-video and, 249
characteristics of, 167–168
communications cabling and, 168–169
industry standards and, 76
structured cabling/premises wiring and, 178
twisted pair cable testers, 142
two-conductor cable, 184
Type X (fire-resistant) gypsum, 110

U
UK CEDIA office, 5
ultra high speed HDMI cables, 189
unbalanced analog signals, 184–185
underfloor cable paths, 84–85
underfloor raceways, 85
underground cable paths, 85–86
underground conduit, 85
underground ducts, 85
unified inch screw thread standard, 145–146
United Kingdom electrical codes, 63
United Kingdom safety codes, 73
United States electrical codes, 63
United States safety codes, 73
unshielded twisted pair (UTP) cable, 170, 193
updates to code, 63
USB-C, 190, 191
US bolts, 147
user interfaces, 260
utility knives, 75, 121, 123
UTP connectors and terminations
modular connectors, 215–216
modular jack terminations, 216–217, 218
110 punch down blocks, 214–215
shielded twisted pair (STP), 218
twisted pair cable testers, 142
traditional style modular plugs, 218
UTP jacket removal tools, 118, 119
UTP (unshielded twisted pair) cable, 170, 193

V

vacuums, 127
vacuum systems, 200, 261
vapor barriers, 112
variables, 42
variations. See change orders
VDV (voice / data / video) verification testers, 142
vehicles, company, 20
velocity of propagation (VoP), 172
ventilation, 72–73
verification test equipment, 225–226
verification testing, 142, 208, 223–224
VESA (Video Electronics Standards Association), 78
VFLs (visual fault locators), 178, 226
viability, 17
Video and Control Architectural Drawing Symbols Standard, 30, 78
video cabling, 186–191
video displays, 250, 251
Video Electronics Standards Association (VESA), 78
video projection, 251
video sources, 250
video switching matrix, 250
vinyl siding, 113
visible outlines, 29
visual fault locators (VFLs), 178, 226
voice / data / video testers, 225
voice / data / video (VDV) verification testers, 142
Volta, Alessandro, 50
voltage, 50, 52–53
voltage surges, 138
voltaic piles, 50
voltmeters, 130, 131–132, 133
volt-ohm-milliammeters (VOMs), 129
volts, 41, 50
volume, 47
VoP (velocity of propagation), 172

W

wall box placement, 112
wall details, 97–98
wall mounted tablets, 255
walls, 83–84, 87
wands, 135
washers, 144, 151–152
water sensors, 259, 261
Watt, James, 51
Watts, 41, 51
wedge anchors, 153–154
weight, 47
white noise, 141
window frames, 97, 98, 103
wing nuts, 151, 152
wire, 164–166
wire insulation removal tools, 118, 209
wire lube, 201
wire staples, 159
wire ties, 159
wiring, 107
wood, 108–112
wooden ladders, 122
wood frame cabling techniques, 194–198
wood frame construction
attics, 106
beams and headers, 102
dimensional lumber, 95
door and window framing, 103
exterior finishes, 113–114
foundations, 105
framing impact on wiring, 107
framing members, 96–98
glue lams, 102
insulation, 112–113
joists, 100–101
load-bearing and non-load-bearing walls, 103–104
patching gypsum board, 112
residential construction, 106–107
roofing material, 113
roofing systems, 101–102
sound transmission, 104–105
studs, 98–100
sub-flooring, 103
use of, 95
vapor barriers, 112
vs masonry and steel, 82
wall box placement, 112
wood, 108–112
wood-framing members, 196
wood l-beams, 108
wood screws, 149
work, 47
work-area components, 178
work breakdown structure documents, 37
workers’ rights, 64
work orders, 19–20, 35, 36
workplace success, 23

X

XLR plug terminations, 237–238

Y

yield strength, 118, 147
This book serves as a comprehensive body of knowledge covering the tasks and responsibilities of a Cabling and Infrastructure Technician (CIT). Built around the CIT job task analysis as defined by subject matter experts, this book covers the essential tools, equipment, principles, and best practices required to successfully install, terminate, and test the infrastructure required to support integrated technology systems. Topics such as jobsite safety, electrical theory, and cable properties are just a few of the critical knowledge areas and skill sets addressed which are necessary to succeed in the rapidly growing technology integration industry. This book is designed to help individuals prepare for the CEDIA Certified Cabling and Infrastructure Technician exam and is also an ideal reference to accompany on-the-job training or more formal education programs.

Mastery of the CIT body of knowledge and related skills is foundational for a variety of careers related to systems integration and is the first step towards achieving the CEDIA Integrated Systems Technician (IST) certification and further specialties. This book is succeeded by the CEDIA Integrated Systems Technician book which expands on the foundational knowledge of the CIT and explores the specific applications related to installation and integration of residential technology equipment and systems.

CEDIA is the authoritative source for education, certification, research, standards, and advocacy for the global residential systems integration industry.
# CEDIA CABLING AND INFRASTRUCTURE TECHNICIAN (CIT) CERTIFICATION

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<thead>
<tr>
<th>Domain 1: Project Processes</th>
<th># of Items</th>
<th>% of Exam</th>
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<td>1.1 Safety</td>
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<td>6.5 Basic Control Devices</td>
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**TOTAL ITEMS** 120  **100%**