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ARCHITECTURAL ABBREVIATIONS

These are common abbreviations found on drawings. Abbreviations on drawings are written in all-capital letters. No period is needed after an abbreviation unless it might be confused with a whole word. Note that some abbreviations, such as AC, can stand for more than one term. Some terms, such as beam, may have more than one acceptable abbreviation.

A

AB Anchor bolt
AC Air condition; alternating current
ADH Adhesive
AG Above grade; against the grain
AGGR Aggregate
AL Aluminum
ALLOW Allowance
ALT Alternate
AP Access panel
APPROX Approximate
ASPH Asphalt
AVG Average

B

B Bathroom; beam
BALC Balcony
BATT Batten
BD Board
BET Between
BF Board feet
BL Building line
BLDG Building
BLK Block
BLKG Blocking
BLR Boiler
BM Beam
BOT Bottom
BR Bedroom
BRG Bearing
BRK Brick
BS Both sides
BSMT Basement

C

CAB Cabinet
CAT Catalog
C CONC Cast concrete
CEM Cement
CER Ceramic
CHIM Chimney
CI Cast iron
CIR; CKT Circuit
CIR BKR Circuit breaker

CIRC Circumference
CKT; CIR Circuit
CL Centerline
CLG Ceiling
CLKG Caulking
CLO Closet
CLR Clear
CO Cleanout
COL Column
COMB Combination
COMP Component; composition
CONC Concentric, concrete
CONST Construction
CONT Continue
CONTR Contractor
CORR Corrugate
CS; X-SECT Cross section
CSG Casing
CSK Countersink
CTD Coated
CTR Center; counter
CW Cold water

D

D Dryer
DBL Double
DC Direct current
DEG Degree
DET Detail
DH Double-hung
DIAG Diagonal
DIM Dimension
DISP Disposal
DK Decking
DL Dead load
DMPR Damper
DN Down
DP Dampproofing
DR Dining room; door; drain
DS Downspout
DW Dishwasher

E

EA Each
ELEC Electric

ENAM Enamel
ENT Entrance
EQ Equal
EST Estimate
EXC Excavate
EXT Extension; exterior

F

FA Footing area
FAB Fabricate
FD Floor drain
FDN Foundation
FIN Finish
FIX Fixture
FL Flashing; floor
FL Flooring
FLUOR Fluorescent
FOS Face of studs
FPRF Fireproof
FR Frame
FS Full size
FTG Footing

G

G Gas; girder
GA Gauge
GALV Galvanize
GAR Garage
GB Glass block
GFCI Ground-fault circuit interrupter
GL Glass; grade line
GND Ground
GR Grade
GYP Gypsum

H

H Hall
HD Head
HDR Header
HDW Hardware
HOR Horizontal
HTR Heater
HVAC Heating, ventilating, air conditioning
HW Hot water

ARCHITECTURAL ABBREVIATIONS, continued

- I**
I I-beam; iron
IB I-beam
ID Inside diameter
INCL Include
- J**
JST Joist
JT Joint
- K**
KIT Kitchen
KD Kiln-dried; knocked down
KO Knockout
kW Kilowatt
- L**
LAM Laminate
LAU Laundry
LAV Lavatory
LBR Lumber
L CL Linen closet
LH Left hand
LIN Linear
LL Live load
LOA Length overall
LR Living room
LT Light
LTL Lintel
LV Louver
- M**
MATL Material
MAX Maximum
MECH Mechanical
MEMB Membrane
MET Metal
MIN Minimum
MIX Mixture
MLDG Molding
MN Main
MOD Model
MRTR Mortar
MULT Multiple
- N**
NAT Natural
NO Number
NOM Nominal
NTS Not to scale
- O**
OA Overall
OC On center
OD Outside diameter
OPNG Opening
OPP Opposite
OR Outside radius
OVHD Overhead
- P**
PAR Parallel
PC Piece; pull chain
PERM Permanent
PERP Perpendicular
PL Plaster; plate; property line
PLMB Plumbing
PLYWD Plywood
PNL Panel
PRCST Precast
PREFAB Prefabricated
PRO Property
PT Part; pressure-treated
PTN Partition
- R**
R Radius, range; riser
RAD Radiator
RD Round
RECP Receptacle
REF Reference; refrigerator
REG Register
REINF Reinforce
REQD Required
RET Return
RF Roof
RFG Roofing
RH Right hand
RM Room
RO Rough opening
- S**
SCH Schedule
SDG Siding
SECT Section
SERV Service
SEW Sewer
SH Sheet; shower
SHTHG Sheathing
SIM Similar
SP Soil pipe
SPEC Specification
- SST** Stainless steel
ST Stairs; steam; street
STD Standard
STG Storage
STK Stock
STL Steel
SUP Supply
SUR Surface
SYM Symbol; symmetrical
SYS System
- T**
T&G Tar and gravel; tongue and groove
TC Terra-cotta
TEMP Temperature
TER Terrazzo
THERMO Thermostat
THRU Through
TOL Tolerance
TOT Total
TR Tread
TUB Tubing
TYP Typical
- U**
UNFIN Unfinished
- V**
V Vacuum, valve; volt
VAP PRF Vapor-proof
VENT Ventilate
VERT Vertical
VP Vent pipe
VS Vent stack
- W**
W Watt
W/ With
WC Water closet
WD Wood
WDW Window
WH Water heater; weep hole
WI Wrought iron
WM Washing machine
W/O Without
WS Weatherstripping
- X, Y, Z**
X-SECT; CS Cross section

ELECTRICAL SYMBOLS

	Wall fixture outlet		Duplex convenience outlet		Branch circuit; exposed
	Blanked ceiling outlet		Convenience outlet other than duplex 1=single, 3=triple, etc.		Home run to panel board; indicate number of circuits by number of arrows
	Blanked wall outlet		Weatherproof convenience outlet		Feeders
	Drop cord		Grounded outlet		Push button
	Ceiling fan outlet		Split wired outlet		Buzzer
	Wall fan outlet		Range outlet		Bell
	Ceiling junction box		Air conditioner outlet		Single-pole switch
	Wall junction box		Switch and convenience outlet		Double-pole switch
	Ceiling lamp holder		Radio and convenience outlet		Three-way switch
	Wall lamp holder		Special purpose outlet (design in specifications)		Four-way switch
	Ceiling lamp holder with pull switch		Floor outlet		Automatic door switch
	Wall lamp holder with pull switch		Floor single outlet		Switch and pilot lamp
	Ceiling pull switch		Floor duplex outlet		Key-operated switch
	Wall pull switch		Lighting panel		Circuit breaker
	Surface or drop individual fluorescent fixture		Power panel		Weatherproof circuit breaker
	Recessed individual fluorescent fixture		Branch circuit; concealed in ceiling or wall		Remote-control switch
	Surface or drop continuous fluorescent fixture		Branch circuit; concealed in floor		Weatherproof switch
	Recessed continuous fluorescent fixture				Low-voltage switch
					Time switch

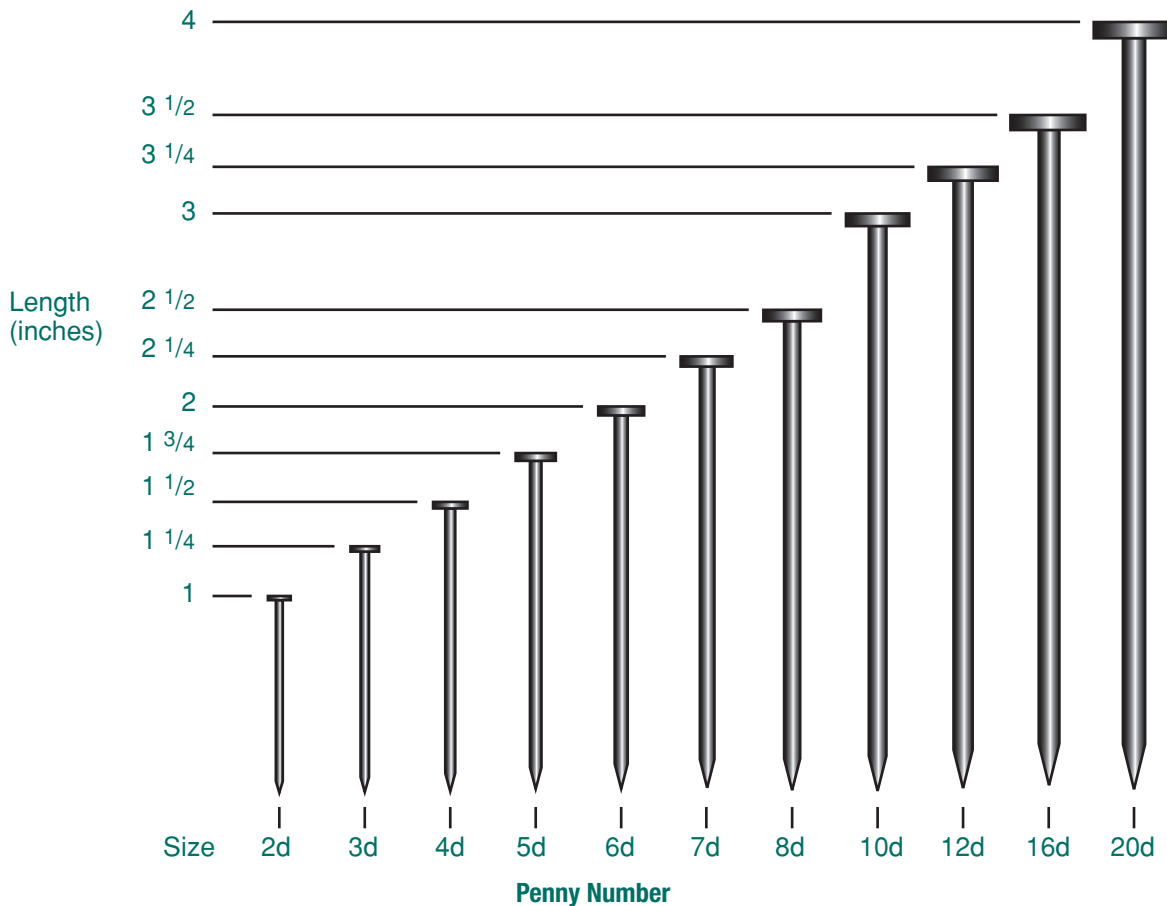
METRIC CONVERSION FACTORS

When you know:	You can find:	If you multiply by:
Length		
inches	millimeters	25.4
feet	centimeters	30.48
yards	meters	0.91
miles	kilometers	1.6
millimeters	inches	0.04
centimeters	inches	0.4
meters	yards	1.09
kilometers	miles	0.62
Area		
square inches	square centimeters	6.45
square feet	square meters	0.09
square yards	square meters	0.84
square miles	square kilometers	2.59
acres	hectares	0.4
square centimeters	square inches	0.16
square meters	square yards	1.2
square kilometers	square miles	0.4
hectares	acres	2.5
Mass		
ounces	grams	28.3
pounds	kilograms	0.45
short tons	metric tons	0.9
grams	ounces	0.04
kilograms	pounds	2.2
metric tons	short tons	1.1
Liquid Volume		
ounces	milliliters	30
pints	liters	0.47
quarts	liters	0.95
gallons	liters	3.8
milliliters	ounces	0.03
liters	pints	2.1
liters	quarts	1.06
liters	gallons	0.26
Temperature		
degrees Fahrenheit	degrees Celsius	0.6 (after subtracting 32)
degrees Celsius	degrees Fahrenheit	1.8 (then add 32)

CUSTOMARY/METRIC CONVERSIONS

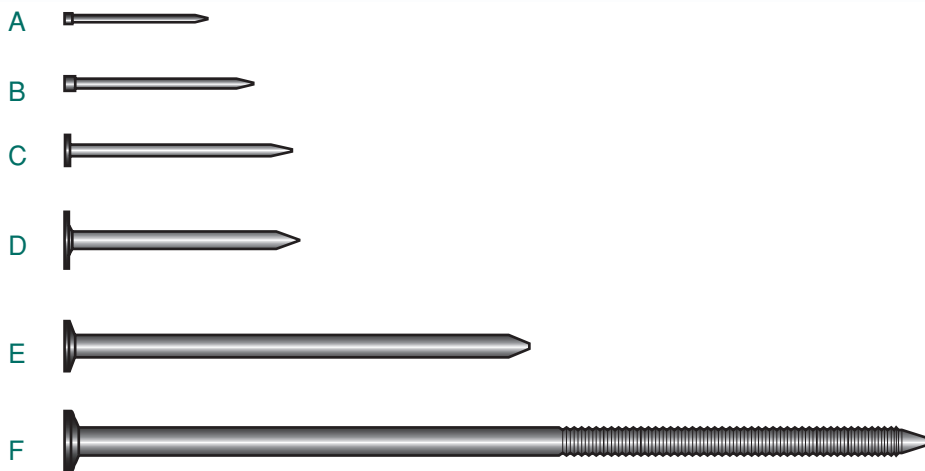
Customary/ English (inches)	Metric (millimeters)
$\frac{1}{32}$	0.8
$\frac{1}{16}$	1.6
$\frac{1}{8}$	3.2
$\frac{3}{16}$	4.8
$\frac{1}{4}$	6.4
$\frac{5}{16}$	7.9
$\frac{3}{8}$	9.5
$\frac{7}{16}$	11.1
$\frac{1}{2}$	12.7
$\frac{9}{16}$	14.3
$\frac{5}{8}$	15.9
$\frac{11}{16}$	17.5
$\frac{3}{4}$	19.1
$\frac{13}{16}$	20.6
$\frac{7}{8}$	22.2
$\frac{15}{16}$	23.8
1	25.4
5	127.0
12	304.8
18	457.2
24	609.6
36	914.4
48	1219.2

RELATIVE NAIL SIZES



Nails are classified by pennyweight and ordered by penny, or pennyweight, number. Note the lower-case *d* following the number below each nail in the above illustration. This number (for example, 2d) is the penny number. The *d* stands for “penny” and is the abbreviation for the Latin word *denarius*, a small coin that was the Roman equivalent of a penny. As you can see, penny number is related to nail length. The penny number increases with nail length: the larger the number, the longer the nail.

TYPES OF NAILS



A few of the more commonly used nails. *A.* Wire brad. *B.* Finish nail. *C.* Box nail. *D.* Roofing nail. *E.* Common nail. *F.* Spike.

RIGGING

Building a house calls for a many different types of materials and pieces of equipment to be delivered to the site. Many of these items are heavy or awkward. Moving them by hand, piece by piece, is slow and time consuming. Whenever possible, builders use equipment such as mobile cranes or lifts to move heavy or awkward loads. Various types of slings or cables will be used to connect the load to the crane. This makes the work go more quickly and reduces the physical effort required.

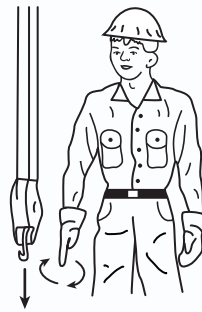
The process of lifting and moving heavy loads is generally referred to as rigging. This term is also used to refer to any use of ropes to lift or secure loads.

A load that is improperly rigged could shift or fall. This would present an extreme hazard to anyone in the area. For this reason, rigging should be done only by those trained in the specific techniques necessary.

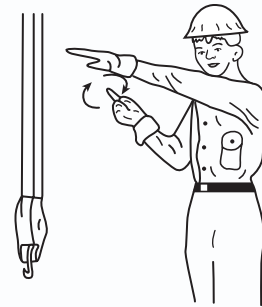
When a load has been properly rigged, it is often necessary for someone on the ground to signal the crane operator to lift, lower, or move the load. A construction site is noisy, so these signals are often given by hand instead of voice. Some of the standard hand signals are noted here. However, only people who are properly trained in using all the basic hand signals should direct a crane. Whenever possible they should stay in one location so that the crane operator knows where to look for them.



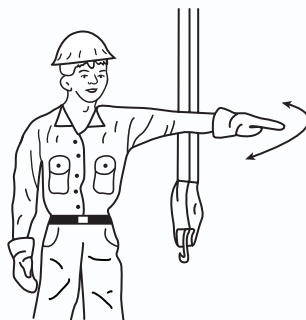
HOIST (RAISE) With forearm vertical, forefinger pointing up, move hand in small horizontal circles.



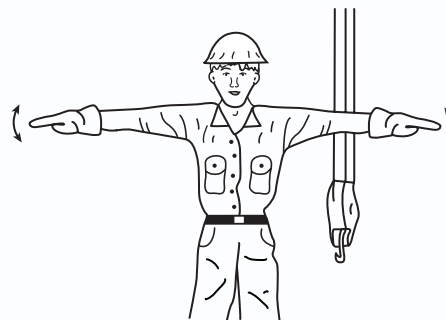
LOWER Extend arm downward, forefinger pointing down, and move hand in small horizontal circles



MOVE SLOWLY Use one hand to give any motion signal and place other hand motionless above hand giving the motion signal (Hoist slowly is shown as example).



STOP Extend arm, palm down, hold position rigidly.



EMERGENCY STOP Extend arm, palm down, moving hand rapidly right and left.