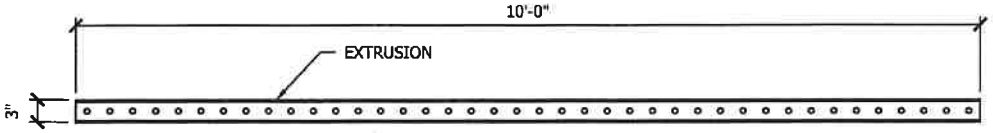
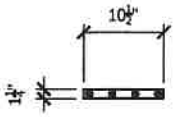
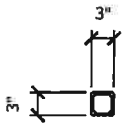
ISOMETRIC



TOP VIEW



SPLICE PLATE



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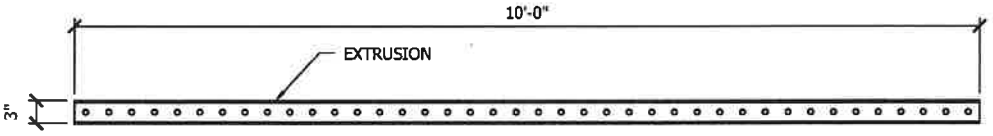

SIDE VIEW

MODTRUSS 3" ALUMINUM w/ SPLICE PLATES TRUSS TABLE

TRUSS SPAN	UNIFORMLY DISTRIBUTED LOAD		CENTER POINT LOAD		THIRD POINT LOAD		QUARTER POINT LOAD		FIFTH POINT LOAD	
	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION
5'-0"	630 lb/ft	0.260 in	1,576 lbs	0.210 in	1,182 lbs	0.270 in	788 lbs	0.250 in	656 lbs	0.260 in
10'-0"	155 lb/ft	1.040 in	776 lbs	0.840 in	582 lbs	1.070 in	388 lbs	1.000 in	323 lbs	1.040 in
15'-0"	51 lb/ft	1.800 in	476 lbs	1.800 in	278 lbs	1.800 in	198 lbs	1.800 in	159 lbs	1.800 in
20'-0"	20 lb/ft	2.400 in	245 lbs	2.400 in	143 lbs	2.400 in	102 lbs	2.400 in	82 lbs	2.400 in
25'-0"	9 lb/ft	3.000 in	133 lbs	3.000 in	78 lbs	3.000 in	56 lbs	3.000 in	44 lbs	3.000 in

MAX MOMENT: 1.98 KIP*FT; MAX SHEAR: 7.31 KIP

PARTS LIST	
EXTRUSION	EX ¼" ALUM
SPLICE PL	PL ⅜" STEEL

NOTES:
1. ALL ALUMINUM IS 6061-T6
2. ALL STEEL IS A572 GR 50

TABLE USAGE NOTES:
1. THE TRUSS IS SUPPORTING VERTICAL LOADS ONLY, I.E. NO LATERAL LOADS ARE APPLIED TO THE TRUSS.
2. THE TRUSS WAS ANALYZED AS A SIMPLE SPAN BEAM WITH SUPPORTS AT TRUSS ENDS ONLY.
3. THE TRUSS HAS BEEN ANALYZED FOR STATIC LOADS ONLY.
4. ALL LOADS ARE APPLIED CENTERED BETWEEN THE WALLS.
5. SELF WEIGHT HAS BEEN CONSIDERED IN THE ANALYSIS OF THE TRUSS.
6. MAXIMUM DEFLECTION LIMITED TO SPAN/100.
7. ALLOWABLE LOADS BASED ON 2020 ALUMINUM DESIGN MANUAL AND AISC 360: SPECIFICATION FOR STEEL BUILDINGS.
8. SPLICE PLATES ASSUMED TO BE INSTALLED INSIDE OF THE MODTRUSS AT ALL (4) SIDES.
9. EACH SPLICE PLATE SHALL HAVE (4) ½"Ø BOLTS. (2) ON EITHER SIDE OF CONNECTION.

MODTRUSS 3" TRUSS

CLARK | REDER ENGINEERING
10091 Mosteller Lane
West Chester, OH 45069
513 851 1223

TRUSS TABLE

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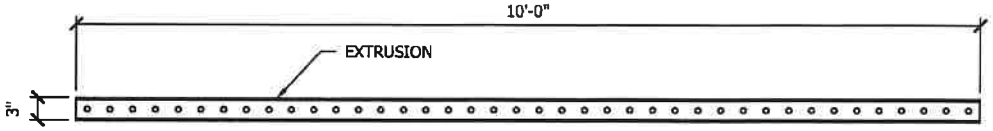
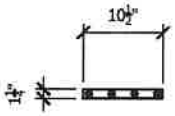
ST1.1

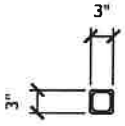
ISOMETRIC



TOP VIEW



SPLICE PLATE



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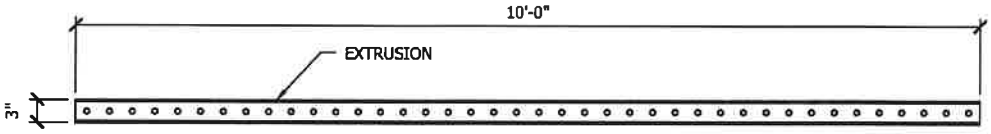

SIDE VIEW

MODTRUSS 3" ALUMINUM w/ SPLICE PLATES TRUSS TABLE

TRUSS SPAN	UNIFORMLY DISTRIBUTED LOAD		CENTER POINT LOAD		THIRD POINT LOAD		QUARTER POINT LOAD		FIFTH POINT LOAD	
	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION
5'-0"	630 lb/ft	0.260 in	1,576 lbs	0.210 in	1,182 lbs	0.270 in	788 lbs	0.250 in	656 lbs	0.260 in
10'-0"	155 lb/ft	1.040 in	776 lbs	0.840 in	582 lbs	1.070 in	388 lbs	1.000 in	323 lbs	1.040 in
15'-0"	67 lb/ft	2.350 in	505 lbs	1.900 in	378 lbs	2.410 in	252 lbs	2.260 in	210 lbs	2.350 in
20'-0"	35 lb/ft	4.000 in	365 lbs	3.410 in	254 lbs	4.000 in	181 lbs	4.000 in	145 lbs	4.000 in
25'-0"	12 lb/ft	4.000 in	194 lbs	4.000 in	113 lbs	4.000 in	81 lbs	4.000 in	65 lbs	4.000 in

MAX MOMENT: 1.98 KIP*FT; MAX SHEAR: 7.31 KIP

PARTS LIST	
EXTRUSION	EX ¼" ALUM
SPLICE PL	PL ⅜" STEEL

NOTES:
1. ALL ALUMINUM IS 6061-T6
2. ALL STEEL IS A572 GR 50

TABLE USAGE NOTES:
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5. SELF WEIGHT HAS BEEN CONSIDERED IN THE ANALYSIS OF THE TRUSS.
6. MAXIMUM DEFLECTION LIMITED TO 4" MAXIMUM.
7. ALLOWABLE LOADS BASED ON 2020 ALUMINUM DESIGN MANUAL AND AISC 360: SPECIFICATION FOR STEEL BUILDINGS.
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MODTRUSS 3" TRUSS

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TRUSS TABLE

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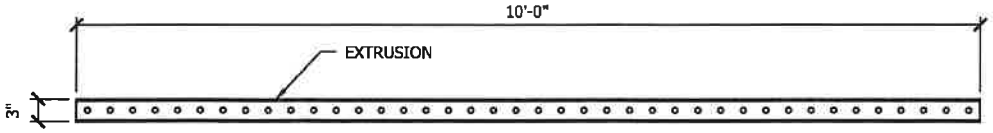
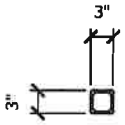
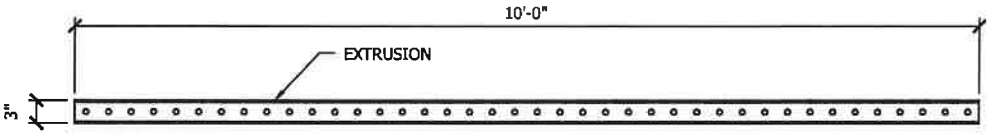
ISOMETRIC



TOP VIEW



END VIEW



SIDE VIEW

MODTRUSS 3" ALUMINUM w/o SPLICE PLATES TRUSS TABLE

TRUSS SPAN	UNIFORMLY DISTRIBUTED LOAD		CENTER POINT LOAD		THIRD POINT LOAD		QUARTER POINT LOAD		FIFTH POINT LOAD	
	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION
5'-0"	1,225 lb/ft	0.510 in	3,063 lbs	0.410 in	2,297 lbs	0.520 in	1,531 lbs	0.490 in	1,276 lbs	0.510 in
10'-0"	179 lb/ft	1.200 in	1,117 lbs	1.200 in	652 lbs	1.200 in	466 lbs	1.200 in	372 lbs	1.200 in
15'-0"	51 lb/ft	1.800 in	476 lbs	1.800 in	278 lbs	1.800 in	198 lbs	1.800 in	159 lbs	1.800 in
20'-0"	20 lb/ft	2.400 in	245 lbs	2.400 in	143 lbs	2.400 in	102 lbs	2.400 in	82 lbs	2.400 in

MAX MOMENT: 3.84 KIP*FT; MAX SHEAR: 7.31 KIP

PARTS LIST	
EXTRUSION	EX ¼" ALUM

NOTES:
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6. MAXIMUM DEFLECTION LIMITED TO SPAN/100.
7. ALLOWABLE LOADS BASED ON 2020 ALUMINUM DESIGN MANUAL.

MODTRUSS 3" TRUSS

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TRUSS TABLE

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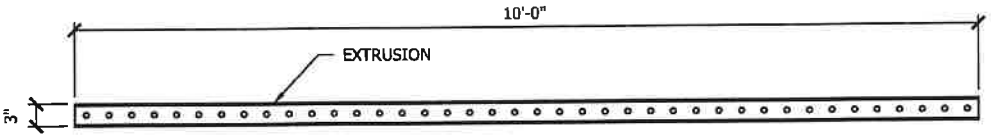
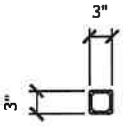
ISOMETRIC



TOP VIEW



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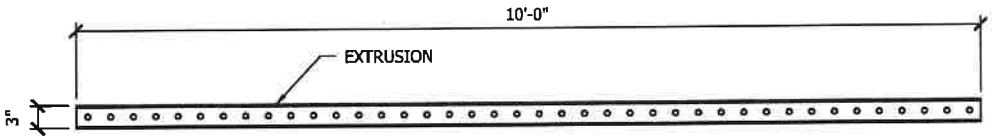

SIDE VIEW

MODTRUSS 3" ALUMINUM w/o SPLICE PLATES TRUSS TABLE

TRUSS SPAN	UNIFORMLY DISTRIBUTED LOAD		CENTER POINT LOAD		THIRD POINT LOAD		QUARTER POINT LOAD		FIFTH POINT LOAD	
	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION	LOAD	DEFLECTION
5'-0"	1,225 lb/ft	0.510 in	3,063 lbs	0.410 in	2,297 lbs	0.520 in	1,531 lbs	0.490 in	1,276 lbs	0.510 in
10'-0"	304 lb/ft	2.030 in	1,520 lbs	1.620 in	1,140 lbs	2.080 in	760 lbs	1.950 in	633 lbs	2.030 in
15'-0"	117 lb/ft	4.000 in	1,000 lbs	3.670 in	638 lbs	4.000 in	456 lbs	4.000 in	365 lbs	4.000 in
20'-0"	35 lb/ft	4.000 in	435 lbs	4.000 in	254 lbs	4.000 in	181 lbs	4.000 in	145 lbs	4.000 in

MAX MOMENT: 3.84 KIP*FT; MAX SHEAR: 7.31 KIP

PARTS LIST	
EXTRUSION	EX ¼" ALUM

NOTES:
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MODTRUSS 3" TRUSS

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TRUSS TABLE

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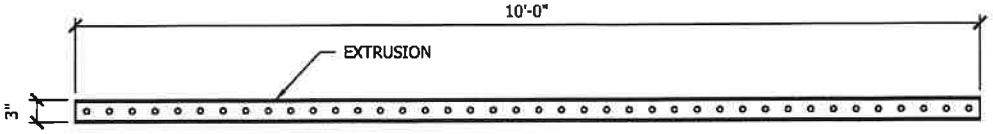
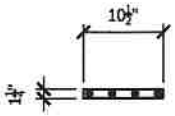
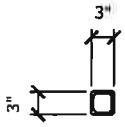
ISOMETRIC



TOP VIEW



SPLICE PLATE



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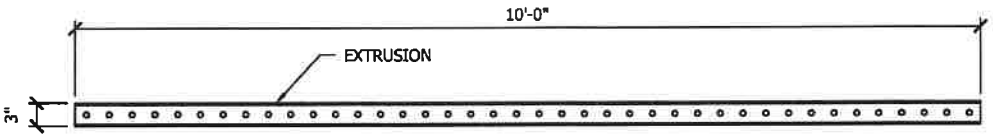

SIDE VIEW

PARTS LIST	
EXTRUSION	EX ¼" ALUM
SPLICE PL	PL ⅜" STEEL

NOTES:
1. ALL ALUMINUM IS 6061-T6
2. ALL STEEL IS A572 GR 50

MODTRUSS 3" ALUMINUM COLUMN AXIAL CAPACITY TABLE	
COLUMN UNBRACED LENGTH	ALLOWABLE AXIAL LOADS
10'-0"	10.85 K
20'-0"	2.71 K
30'-0"	1.21 K
40'-0"	0.68 K

TABLE USAGE NOTES:
1. ALL CAPACITIES SHOAWN ARE PROVIDED IN KIPS (1 KIP - 1,000 LBS).
2. ALL COLUMNS ARE ASSUMED TO BE PINNED TOP & BOTTOM, AND USE AN EFFECTIVE LENGTH FACTOR OF K = 1.0 .
3. ALL CAPACITIES ASSUME NO OTHER SHEAR, FLEXURE, OR TORSIONAL FORCES ARE APPLIED TO THE COLUMN.
4. SPLICE PLATES ASSUMED TO BE INSTALLED INSIDE OF THE MODTRUSS AT ALL (4) SIDES.
5. EACH SPLICE PLATE SHALL HAVE (4) ½"Ø BOLTS. (2) ON EITHER SIDE OF CONNECTION.

MODTRUSS 3" TRUSS

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ALUMINUM COLUMN AXIAL CAPACITY TABLE

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