

*Hughes 107*

C-1

CRITICAL MATERIAL LISTS  
FOR  
FPHA STANDARD BUILDINGS  
PROJECT FACILITIES  
SERIES TPS - TRAILER PROJECTS

\* WPB APPROVED LISTS \*

*Administration*  
u.s. ~~Federal~~ Public Housing Authority - National Housing Agency

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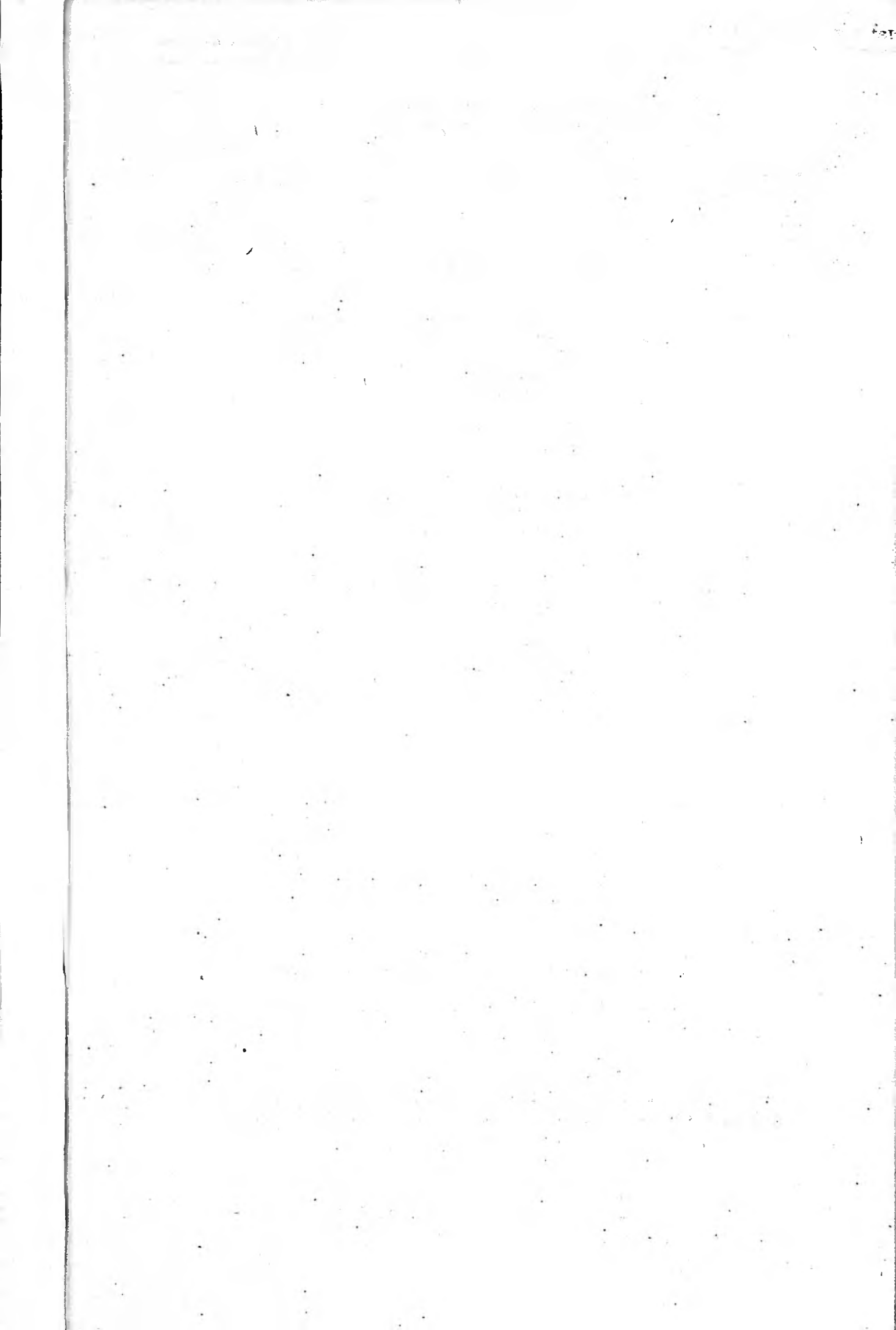
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INDEX OF LIST NUMBERS  
FOR  
SERIES TPS - PROJECT FACILITIES

<u>List Numbers</u>	<u>Building Elements</u>	<u>Building Numbers</u>
301	Community Building	301
302	Community Building	302
302-A	Community Building with one play room	302-A
303	Community Building	303
303-A	Community Building with one play room	303-A
304	Community Building	304
304-A	Community Building with one play room	304-A
304-A-B	Community Building with two play rooms	304-A-B
305	Community Building	305
305-A	Community Building with one play room	305-A
305-A-B	Community Building with two play rooms	305-A-B
313	Toilet, Shower and Laundry Building (for 50 units)	313
314	Toilet, Shower and Laundry Building (for 25 units)	314
316	Collection Station	316
321-A	Maintenance Building	321-A
321-B	Maintenance Building	321-B
321-C	Maintenance Building	321-C
321-D	Maintenance Building	321-D



INDEX OF VARIATION LETTERS  
PROJECT FACILITIES - TRAILER PROJECTS

The variation letters employed throughout this Critical Material List indicate the following:

GROUP I

- Variation A: Coal Space Heating +15° design temperature  
Coal Water Heating
- Variation C: Coal Space Heating 0° design temperature  
Coal Water Heating
- Variation D: Coal Space Heating -20° design temperature  
Coal Water Heating
- Variation E: Oil Space Heating +15° design temperature  
Oil Water Heating
- Variation G: Oil Space Heating 0° design temperature  
Oil Water Heating
- Variation H: Oil Space Heating -20° design temperature  
Oil Water Heating
- Variation I: Gas Space Heating +15° design temperature  
Gas Water Heating
- Variation L: Gas Space Heating 0° design temperature  
Gas Water Heating
- Variation M: Gas Space Heating -20° design temperature  
Gas Water Heating

GROUP II

- Variation U: Cooking (Piping and Equipment) Gas
- Variation V: Cooking (Equipment) Kerosene
- Variation W: Cooking (Equipment) Coal

GROUP III

- Variation X1: Wood Frame Walls and Wood Frame Floor Construction
- Variation X2: Wood Frame Walls and Concrete Floor Slab on Ground

IMPORTANT NOTE: THE COMPLETE WORKING LIST FOR EACH PROJECT SHALL INCLUDE ALL OF THE UNMARKED ITEMS AND APPLICABLE VARIATION ITEMS, ONE FROM EACH GROUP AS SELECTED TO CONFORM WITH TYPE OF FUEL DESIRED.

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POSSIBLE COMBINATION OF VARIATIONS  
PROJECT FACILITIES - TRAILER PROJECTS

<u>Building</u>	<u>Space Heating</u>	<u>Water Heating</u>	<u>Gas Piping Cook.Equip.</u>	<u>Kitchen Equip.</u>	<u>Refrigerator</u>	<u>Structural</u>
All Community Buildings, 301 to 305-A-B inclusive	A	A	-	W	Ice or Mech. in all cases.	X-1 or X-2 in all cases
	C	C	-	W		
	D	D	-	W		
	A	A	U	U		
	C	C	U	U		
	D	D	U	U		
	E	E	-	V		
	G	G	-	V		
	H	H	-	V		
	I	I	U	U		
L	L	U	U			
M	M	U	U			
Toilet, Shower and Laundry Unit, 313 and 314	A	A	-	-	-	X-2 in all cases
	C	C	-	-	-	
	D	D	-	-	-	
	E	E	-	-	-	
	G	G	-	-	-	
	H	H	-	-	-	
	I	I	-	-	-	
	L	L	-	-	-	
M	M	-	-	-		
Maintenance Buildings, 321-A to 321-D inclusive	A	-	-	-	-	X-2 in all cases
	C	-	-	-	-	
	D	-	-	-	-	
	E	-	-	-	-	
	G	-	-	-	-	
	H	-	-	-	-	
	I	-	-	-	-	
	L	-	-	-	-	
M	-	-	-	-		

1877

1877



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS - Project Facilities Element: Community Building No. 301  
Heating System: Forced warm air  
Construction: Wood Frame Walls - 1 story - Framed Wood or Concrete Floors

-WPB Approved List-

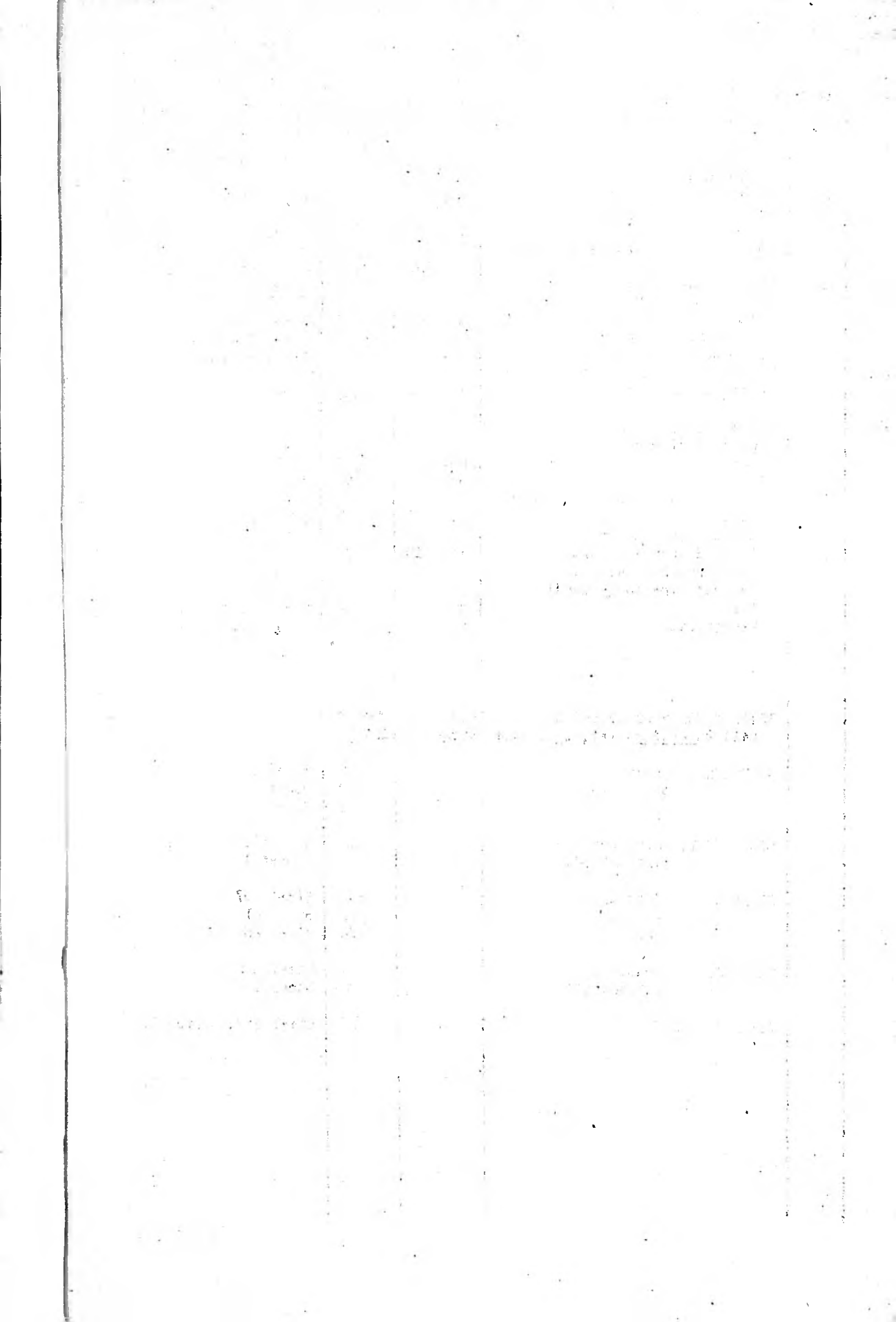
Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wires, etc		20	Steel 20
240		Insect screen (1/2 screens)	sf. 197	26	Steel 23, zinc 3
260		Sheet metal flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		1	Zinc 1
290		Builders hardware			
		Doors (outside)	no. 3		
		Doors (inside)	no. 11		
		Windows	no. 14		
		Fire exit bolts	no. 1		
		Door closers	no. 4		
		Accordion doors	no. 3		
		Misc. cab. & wicket hardware	no. 10		
		Total builders hardware		134	Steel 128, brass 6
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		355	Steel 355
	X-1	Galvanized		40	Steel 36, zinc 4
	X-2	Plain		323	Steel 323
	X-2	Galvanized		35	Steel 31, zinc 4
300		ELECTRICAL			
320		Entrance 60A - 3P - 2B & SN Panelboards:	no. 1	5	Steel 4.5, cu 0.5
		Cir. 6 - 30A - 1P	no. 1	7	Steel 6, cu 1
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. lf single wire)			
		#14 wire	lf. 960	13	Copper 13
	EGH	#14 wire	lf. 60	1	Copper 1
		# 8 wire	lf. 100	5	Copper 5
340		Outlet boxes - nonmetallic	no. 24		
350		Switches	no. 5	0.2	Steel 0.1, cu 0.1
		Receptacles	no. 6	0.2	Steel 0.1, cu 0.1
360		Straps, misc.		1	Steel 1
370		Solder		1	Solder 1
380		Fixtures	no. 13	3	Steel 2.25, cu 0.75
400		PLUMBING			
420		Fixture trim, 2 WC, 3 lavs., 1 sink	no. 6	42	CI 34 Stl 4 Br 3 Ru 1
430		CI pipe & fittings size 3"	lf. 5		
		size 2"	lf. 55		
		Subtotal pipe & fittings (If lead is used for roughing makeup of soil pipe, the sub-total of 346 will <u>change</u> to . . . . .)	lf. 60	346	CI 346
				349	CI 319, lead 30)
		*Under Rough Hardware, 85% of steel is classed as "A" Product			

Crit. List No.	Var.	Critical Material.	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Galv. steel pipe & fittings			
		Pipe size 1-1/2"	lf. 25		
		Pipe size 1-1/4"	lf. 15		
		Subtotal steel pipe & ftgs.	lf. 40	117	CI 12 <u>Stl 100</u> Zinc 5
		(If lead is used for roughing make-up of waste pipe, the sub-total of 117 lbs. will <u>change</u> to	.....	124	CI 13 Stl 96 Zn 5 Lead 10
		Calking and flashing lead		87	Lead 87
		Misc. hangers, etc.		14	Steel 14
440		Galv. water pipe & fittings			
		Pipe size 3/8"	lf. 20		
		Pipe size 1/2"	lf. 55		
		Pipe size 3/4"	lf. 75		
		Subtotal pipe & fittings	lf. 150	210	CI 19 Stl 181 Zn 10
		Pipe size 1"	lf. 15	32	CI 5 <u>Stl 26</u> Zn 1
		Misc. hangers, etc.		7	Steel 7
		Valves and cocks	no. 3	5	CI 1, brass 4
450		Water Heaters			
	ACD	35 GPH/100 deg. rise coal htr.	no. 1	145	CI 145
	ILM	20 GPH/100 deg. rise auto. gas storage heater	no. 1	145	CI 7 Stl 132 Br 3 Zn 3
	EGH	30 GPH/100 deg. rise auto. oil storage heater	no. 1	225	CI 12 Stl 206 Br 3 Zn 4
	ACD	30 gallon storage tank	no. 1	70	Steel 67, zinc 3
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Temperature relief valve	no. 1	1	Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Thermometer	no. 1	2	CI 1, brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 Stl 3 Br 1
480		Black gas pipe & fittings			
		Pipe size 1-1/2"	lf. 15		
		Pipe size 1-1/4"	lf. 10		
		Pipe size 3/4"	lf. 15		
		Subtotal pipe & fittings	lf. 40	90	CI 9, <u>steel 81</u>
	ILM	Misc. hangers, etc.		3	Steel 3
	ILM	Valves and cocks	no. 2	7	Brass 7
	U	Black gas pipe & fittings			
		Pipe size 3/4"	lf. 22	31	JI 5, <u>steel 26</u>
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	+15° coal Btu 104,000	no. 1	950	CI 875, steel 75
	C	0° coal Btu 116,000	no. 1	950	CI 875, steel 75
	D	-20° coal Btu 120,000	no. 1	950	CI 875, steel 75
	EI	+15° oil and gas Btu 104,000	no. 1	890	CI 815, steel 75
	GL	0° oil and gas Btu 116,000	no. 1	890	CI 815, steel 75
	HM	-20° oil and gas Btu 120,000	no. 1	890	CI 815, steel 75
		Blower CFM 1000	no. 1	190	CI 15, steel 175
		Motor HP 1/4 and controls	no. 1	30	CI 11 Stl 11 Cu 6 Ru 2
		Propeller type exhaust fan 10" size comp. with auto. shutter	no. 1	22	CI 5, steel 16, cu 1
		Ducts, metal allowed for relief duct, 3 lf at furnace & ftgs., fasteners, hangers, etc.	lf. 100	150	Steel 150
		Registers and grilles	no. 12	40	Steel 40

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
550	EGH	Firing Equipment - Furnace			
	ILM	+15°, 0° & -20° oil burner GPH 2	no. 1	155	CI 124 Stl 23 Cu 8
	EGH	+15°, 0° & -20° gas burner input Btu 170,000	no. 1	238	CI 209 Stl 24 Cu 5
	EGH	Oil pipe, fittings and valves, 2" and 3/4"	lf. 90	223	CI 38 Stl 175 Cu 10
560	EGH	Reinforcing steel for oil tank		15	Steel 15
	ACD	Control Equipment			
		Relay	no. 1	7	Steel 6 cu 1
		Damper regulator	no. 1	8	Steel 7 cu 1
		Thermostats	no. 4	4	Steel 3 cu 1
570		Breeching - flue connection with vertical flue through roof	lf. 15	115	Steel 115
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	350	CI 300 steel 50
	U	Gas range	no. 1	91	CI 25 Stl 65 cu 1
	V	Oil range with self-contained tank	no. 1	137	CI 30 stl 105 cu 2
	W	Flue connection For coal range 7" dia.	lf. 10	30	Steel 30
		Refrigerator 6 cu. ft. (select type to be used)			
		Ice	no. 1	10	Steel 9, zinc 1
		Mechanical	no. 1	300	CI 35 Stl 240 Cu 25

TOTAL WEIGHTS OF CONTROLLED MATERIALS - 'A' PRODUCTS:  
(All underlined weights in the foregoing list)

STRUCTURE: Constant	20	Steel 20
Variant X-1	332	Steel 332
Variant X-2	303	Steel 303
ELECTRICAL: Constant	18	Copper 18
Variant EGH	1	Copper 1
PLUMBING: Constant	307	Steel 307
Variant ILM	81	Steel 81
Variant U	26	Steel 26
HEATING: Constant	150	Steel 150
Variant EGH	190	Steel 190
TOTAL CONSTANT	495	Steel 477, copper 18



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities

Heating System: Forced warm air

Element: Community Building No. 302

Construction: Wood frame walls - 1 story - framed wood or concrete floors

-WPB Approved List-

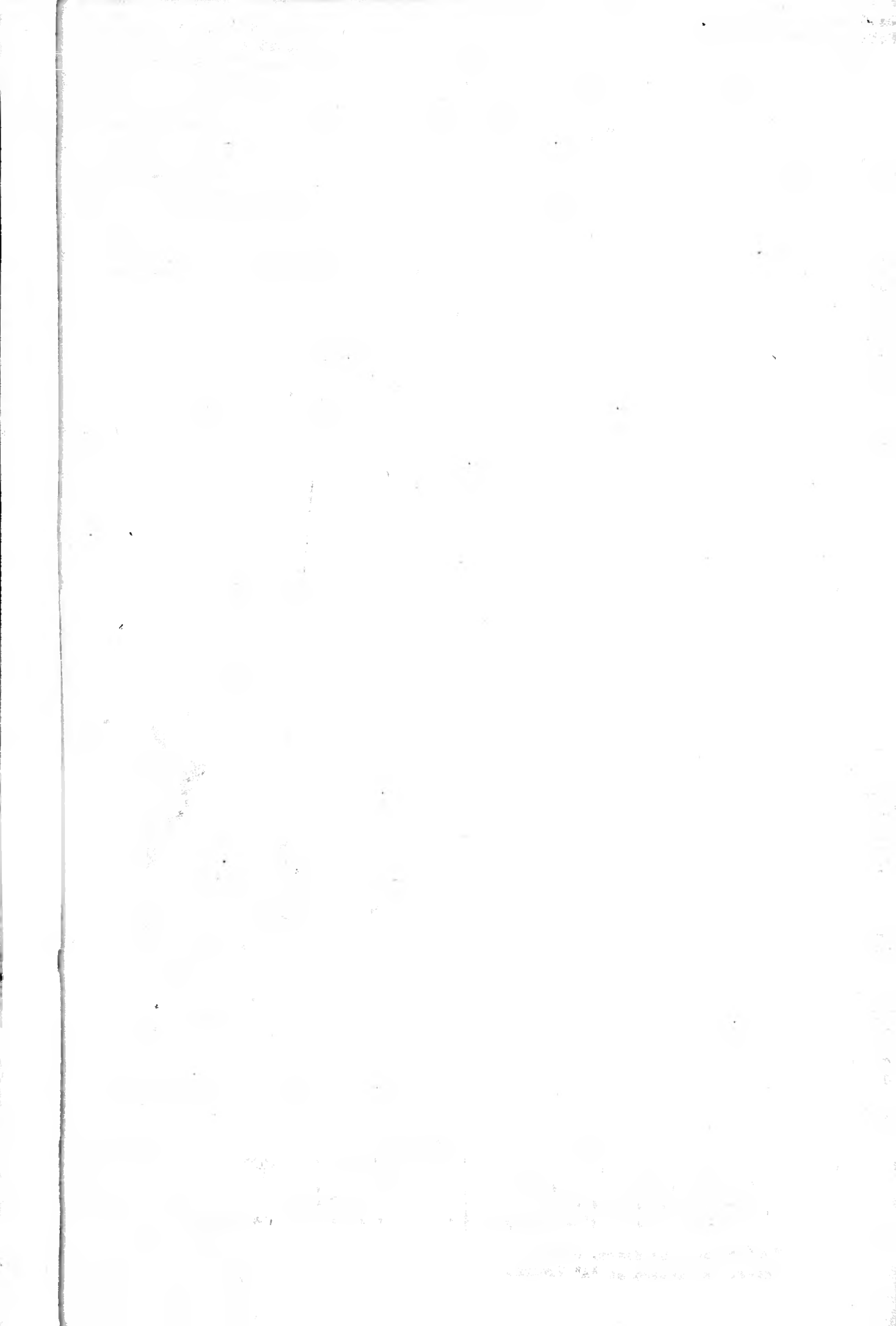
Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire		40	Steel 40
240		Insect screen (1/2 screen)	sf. 265	35	Steel 31, zinc 4
260		Sheet metal flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		2	Zinc 2
290		Builders hardware			
		Doors - outside	no. 6		
		Doors - inside	no. 15		
		Windows	no. 25		
		Fire exit bolts	no. 2		
		Door closers	no. 7		
		Coal doors	no. 1		
		Fire doors	no. 1		
		Misc. cab. & wicket hardware	no. 15		
		Total builders hardware		260	Steel 246, brass 14
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		703	Steel 703
	X-1	Galvanized		80	Steel 72, zinc 8
	X-2	Plain		643	Steel 643
	X-2	Galvanized		70	Steel 63, zinc 7
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN Panelboards:	no. 1	5	Steel 4.5, cu 0.5
		Cir. 8 - 30A - 1P	no. 1	9	Steel 7.5, cu 1.5
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	1f 1200	16	Copper 16
	EGH	#14 wire	1f. 60	1	Copper 1
		# 8 wire	1f. 100	5	Copper 5
340		Outlet boxes - nonmetallic	no. 30		
350		Switches	no. 5	0.2	Steel 0.1, cu 0.1
		Receptacles	no. 7	0.2	Steel 0.1, cu 0.1
360		Straps, misc.		2	Steel 2
370		Solder		1	Solder 1
380		Fixtures	no. 18	4.5	Steel 3.5, cu 1
400		PLUMBING			
420		Fixture trim, 2WC, 3 lavs., 1 sink, 1S.S., 1 D.F.	no. 8	60	Stl 4 CI 50 Br 4 Ru 2
430		CI pipe & ftgs., size 4"	1f. 10		
		size 3"	1f. 15		
		size 2"	1f. 50		
		Subtotal pipe & fittings (If lead is used for roughing make-up of soil pipe, the subtotal of 490 lbs will change to	1f. 75	490	CI 490
				492	CI 462, lead 30
		*Under Rough Hardware, 85% of steel is classed as "A" Product			

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Galv. steel pipe & fittings Pipe size 1-1/2"	lf. 35		
		Pipe size 1-1/4"	lf. 30		
		Subtotal pipe & fittings (If lead is used for roughing make-up of waste pipe, the sub- total of 202 lbs will <u>change</u> to	lf. 65	202'	CI 27, <u>Stl 167</u> , Zn 8
		Calking and flashing lead		211	CI 31 stl 152 Zn 8 Lead 20)
		Misc. hangers, etc.		130	Lead 130
440		Galv. water pipe & fittings Pipe size 3/8"	lf. 10		
		Pipe size 1/2"	lf. 110		
		Pipe size 3/4"	lf. 25		
		Subtotal pipe & fittings	lf. 145	167	CI 19, <u>Stl 141</u> , Zn 7
		Pipe size 1"	lf. 20	45	CI 6, <u>Stl 37</u> , Zn 2
		Misc. hangers, etc.		9	Steel 9
		Valves and cocks	no. 4	8	CI 2, brass 6
450		Water Heaters			
	ACD	35 GPH/100 deg. rise coal htr.	no. 1	145	CI 145
	ILM	20 GPH/100 deg. rise auto. stg. heater, gas	no. 1	145	CI 7 Stl 132 Zn 3 Br 3
	EGH	30 GPH/100 deg. rise auto. stg. oil heater	no. 1	225	CI 12 Stl 206 Zn 4 Br 3
	ACD	30 gallon storage tank	no. 1	70	Steel 67, zinc 3
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Temperature relief valve	no. 1	1	Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Thermometer	no. 1	2	CI 1, brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7, Stl 3, brass 1
480		Black gas pipe & fittings Pipe size 1-1/2"	lf. 15		
		Pipe size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	60	CI 11, <u>steel 49</u>
	ILM	Misc. hangers, etc.		5	Steel 5
	ILM	Valves and cocks	no. 2	8	Brass 8
	U	Black gas pipe & fittings Pipe size 3/4"	lf. 14	19	CI 2, <u>steel 17</u>
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	+15° coal Btu 174,000	no. 1	1447	CI 1350, steel 97
	C	0° coal Btu 200,000	no. 1	1447	CI 1350, steel 97
	D	-20° coal Btu 210,000	no. 1	1852	CI 1750, steel 102
	EI	+15° oil & gas Btu 174,000	no. 1	1367	CI 1270, steel 97
	GL	0° oil & gas Btu 200,000	no. 1	1367	CI 1270, steel 97
	HM	-20° oil & gas Btu 210,000	no. 1	1752	CI 1650, steel 102
		Blower 2000 CFM	no. 1	190	CI 15, steel 175
		Motor 1/2 HP and controls	no. 1	50	CI 19 Stl 19 Cu 10 Ru 2
		Propeller type exhaust fan - 10" size complete with auto. shutter	no. 1	22	CI 5 Steel 16 Cu 1
		Ducts - metal allowed for re- lief duct, 3 lf at furnace, ftgs., fasteners, hanger etc.	lf. 125	200	<u>Steel 200</u>
		Registers and grilles	no. 15	60	<u>Steel 60</u>

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
550	EGH	Firing Equipment - Furnaces			
	IL	+15°, 0° & -20° oil burner GPH 3	no. 1	155	CI 124 Stl 23 Cu 8
		+15°, 0° & -20° gas burner			
	M	Btu input 280,000	no. 1	247	CI 217 Stl 25 Cu 5
	EGH	-20° gas burner Btu input 300,000	no. 1	256	CI 225, Stl 26, Cu 5
	EGH	Oil pipe, fittings & valves, 2" and 3/4"	lf. 90	223	CI 38 Stl 175 Cu 10
	EGH	Reinf. steel for oil tank		15	Steel 15
560		Control Equipment			
		Relay	no. 1	7	Steel 6, copper 1
	ACD	Damper regulator	no. 1	8	Steel 7, copper 1
		Thermostats	no. 4	4	Steel 3, copper 1
570		Breeching-flue conn. 10" dia.	lf. 10	75	Steel 75
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	350	CI 300, steel 50
	U	Gas range	no. 1	91	CI 25 Stl 65 Cu 1
	V	Oil range with self-contained tank	no. 1	137	CI 30 Stl 105 Cu 2
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator, 6 cu. ft. (select type to be used)			
	Ice	no. 1	10	Steel 9, zinc 1	
	Mechanical	no. 1	300	CI 35 Stl 240 Cu 25	

TOTAL WEIGHTS OF CONTROLLED MATERIALS - 'A' PRODUCTS:  
(All underlined weights in the foregoing list)

STRUCTURE: Constant	40	Steel 40
Variant X-1	659	Steel 659
Variant X-2	600	Steel 600
ELECTRICAL: Constant	21	Copper 21
Variant EGH	1	Copper 1
PLUMBING: Constant	345	Steel 345
Variant ILM	49	Steel 49
Variant U	17	Steel 17
HEATING: Constant	200	Steel 200
Variant EGH	190	Steel 190
TOTAL CONSTANT	606	Steel 585, copper 21





CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS - Project Facilities Element: Community Building No. 302-A  
Heating System: Forced Warm Air  
Construction: Wood Frame Walls - 1 story - Framed Wood or Concrete Floors

-WPB Approved List-

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire etc.		60	Steel 60
240		Insect screen (1/2 screen)	sf. 447	58	Steel 52 Zinc 6
260		Sheet metal, flashings, chimney only		12	Steel 10 Zinc 2
280		Glazing points		3	Zinc 3
290		Builders hardware			
		Doors - outside	no. 7		
		Doors - inside	no. 21		
		Windows	no. 34		
		Fire exit bolts	no. 4		
		Door closers	no. 13		
		Coal doors	no. 1		
		Fire doors	no. 1		
		Misc. cab. & wicket hardware	no. 25		
		Total builders hardware		345	Steel 328 Brass 17
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		1243	Steel 1243
	X-1	Galvanized		139	Steel 125 Zinc 14
	X-2	Plain		1100	Steel 1100
	X-2	Galvanized		120	Steel 108 Zinc 12
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN	no. 1	5	Steel 4.5 Copper 0.5
		Panelboards:			
		Cir. 10 - 30A - 1P	no. 1	11	Steel 9 Copper 2
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5 Copper 0.5
330		Conductors (equiv. 1. f. single wire)			
		#14 wire	lf. 1800	23	Copper 23
	EGH	#14 wire	lf. 60	1	Copper 1
		# 8 wire	lf. 100	5	Copper 5
340		Outlet boxes - nonmetallic	no. 45		
350		Switches	no. 6	0.2	Steel 0.1 Copper 0.1
		Receptacles	no. 9	0.3	Steel 0.15 Copper 0.15
360		Straps, misc.		3	Steel 3
370		Solder		1	Solder 1
380		Fixtures	no. 30	7.5	Steel 6 Copper 1.5
400		PLUMBING			
420		Fixture trim, 6WC, 7 lavs., 2 sinks, 1 S.S., 1 D.F.	no. 17	140	CI 122 Stl 8 Br 7 Ru 3
430		CI pipe & ftgs., size 4"	lf. 30		
		size 3"	lf. 35		
		size 2"	lf. 70		
		Subtotal pipe & fittings	lf. 135	1025	CI 1025
		(If lead is used for roughing make-up of soil pipe the sub-total of 1025 lbs. will change to . . . . .)		1028	CI 938 Lead 90)

\*Under Rough Hardware, 85% of steel is classed as "A" Product

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights lbs.
430 (Cont.)		Galv. steel pipe & fittings			
		Pipe size 1-1/2"	lf. 50		
		Pipe size 1-1/4"	lf. 36		
		Subtotal pipe & fittings	lf. 86	251'	CI 27 <u>Stl 214</u> Zn 10
		(If lead is used for roughing make-up of waste pipe, the sub-total of 251 lbs. will <u>change to</u> . . . . .)		283	CI 38 Stl 205 Zn 10 Lead 30)
		Calking and flashing lead		240	Lead 240
		Misc. hangers, etc.		30	Steel 30
440		Galv. water pipe & fittings			
		Pipe size 3/8"	lf. 20		
		Pipe size 1/2"	lf. 115		
		Pipe size 3/4"	lf. 100		
		Subtotal pipe & fittings	lf. 235	285	CI 27 <u>Stl 246</u> Zn 12
		Pipe size 1"	lf. 45	88	CI 7 <u>Stl 77</u> Zn 4
		Misc. hangers, etc.		10	Steel 10
		Valves and cocks	no. 4	8	CI 2 Brass 6
450		Water Heaters			
	ACD	35 GPH/100 deg. rise coal htr.	no. 1	145	CI 145
	ILM	20 GPH/100 deg. rise auto. gas storage type, 45 gallon self contained tank	no. 1	390	CI 25 Stl 353 Zn 8 Br 4
	EGH	50 GPH/100 deg. rise auto. oil storage type, 35 gallon self contained tank	no. 1	540	CI 200 Stl 328 Zn 8 Br .
	ACD	66 gallon storage tank	no. 1	154	Steel 140 Zinc 14
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Thermometer	no. 1	2	CI 1 Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 Steel 3 Brass 1
480	ILM	Black gas pipe & fittings			
		Pipe size 2"	lf. 15		
		Pipe size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	82	CI 15 <u>Steel 67</u>
	ILM	Misc. hangers, etc.		8	Steel 8
	ILM	Valves and cocks	no. 2	13	Brass 13
	U	Black gas pipe & fittings			
		Pipe size 3/4"	lf. 14	19	CI 2 <u>Steel 17</u>
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	+15° coal Btu 350,000	no. 1	2233	CI 2100 Steel 133
	C	0° coal Btu 400,000	no. 1	2443	CI 2300 Steel 143
	D	-20° coal Btu 410,000	no. 1	2443	CI 2300 Steel 143
	EI	+15° oil & gas Btu 350,000	no. 1	2133	CI 2000 Steel 133
	GL	0° oil & gas Btu 400,000	no. 1	2313	CI 2170 Steel 143
	HM	-20° oil & gas Btu 410,000	no. 1	2313	CI 2170 Steel 143
		Blower 3500 CFM	no. 1	264	CI 25 Steel 239
		Motor 1 HP & Controls	no. 1	80	CI 30 Stl 30 Cu 16 Ru 4
		Propeller type exhaust fan-10"			
		size complete with auto. shutter	no. 1	22	CI 5 Stl 16 Cu 1
		Ducts-metal allowed for relief duct			
		3 lf. at furnace, ftgs., fasteners, hangers, etc.	lf. 175	275	<u>Steel 275</u>

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont.)		Registers and grilles	no. 25	100	Steel 100
550		Firing Equipment			
	EGH	415°, 0° & -20° oil burners GPH 5	no. 1	250	CI 200 Stl 38 Cu 12
	I	415° Gas burner, Btu input 500,000	no. 1	272	CI 239 Stl 27 Cu 6
	L	0° Gas burner, Btu input 570,000	no. 1	272	CI 239 Stl 27 Cu 6
	M	-20° Gas burner, Btu input 600,000	no. 1	292	CI 257 Stl 29 Cu 6
	EGH	Oil pipe fitting & valves 2" & 3/4"	lf. 90	223	CI 38 Stl 175 Cu 10
	EGH	Reinforcing steel for oil tank		15	<u>Steel 15</u>
560		Control Equipment			
		Relay	no. 1	7	Steel 6 Cu 1
	ACD	Damper regulator	no. 1	8	Steel 7 Cu 1
		Thermostats	no. 4	4	Steel 3 Cu 1
570		Breeching-flue conn. 12" dia.	lf. 10	90	Steel 90
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal Range	no. 1	580	CI 400 Steel 180
	U	Gas Range	no. 1	400	CI 220 Steel 170 Cu 10
	V	Oil Range with self contained tank	no. 1	470	CI 320 Steel 140 Cu 10
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator, 25 cu. ft. (select type to be used)			
		Ice	no. 1	60	Steel 55 Zinc 5
		Mechanical	no. 1	650	CI 70 Steel 500 Cu 80
		Dishwashing sink	no. 1	230	CI 15 Steel 205 Zn 10
		Sink	no. 1	109	CI 4 Steel 100 Zn 5

TOTAL WEIGHTS OF CONTROLLED MATERIALS - "A" PRODUCTS:  
(All underlined weights in the foregoing list)

STRUCTURE:	Constant	60	Steel 60
	Variant X-1	1163	Steel 1163
	Variant X-2	1027	Steel 1027
ELECTRICAL:	Constant	28	Copper 28
	Variant EGH	1	Copper 1
PLUMBING:	Constant	537	Steel 537
	Variant ILM	67	Steel 67
	Variant U	17	Steel 17
HEATING:	Constant	275	Steel 275
	Variant EGH	190	Steel 190
TOTAL CONSTANT		900	Steel 872, copper 28

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CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS PROJECT FACILITIES Element: Community Building No. 303  
Heating System: Forced warm air  
Construction: Wood frame walls - 1 story - framed wood or concrete floors

-WPB Approved List-

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire,		60	Steel 60
240		Insect screen (1/2 screens)	sf. 308	40	Steel 36, zinc 4
260		Sheet metal, flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		2	Zinc 2
290		Builders hardware			
		Doors - outside	no. 6		
		Doors - inside	no. 18		
		Windows	no. 29		
		Fire exit bolts	no. 4		
		Door closers	no. 11		
		Coal doors	no. 1		
		Fire doors	no. 1		
		Misc. cab. & wicket hdw.	no. 20		
		Total builders hardware		315	Steel 300, brass 15
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		1056	Steel 1056
	X-1	Galvanized		118	Steel 106, zinc 12
	X-2	Plain		935	Steel 935
	X-2	Galvanized		105	Steel 94, zinc 11
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN Panelboards:	no. 1	5	Steel 4.5, copper 0.5
		Cir. 8 - 30A - 1P	no. 1	9	Steel 7.5, copper 1.5
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, copper 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	1f 1320	17	Copper 17
	EGH	#14 wire	1f. 60	1	Copper 1
		# 8 wire	1f. 100	5	Copper 5
340		Outlet boxes - nonmetallic	no. 33		
350		Switches	no. 5	0.2	Steel 0.1, copper 0.1
		Receptacles	no. 8	0.3	Steel 0.15, copper 0.15
360		Straps, misc.		2	Steel 2
370		Solder		2	Solder 2
380		Fixtures	no. 20	5	Steel 4, copper 1
400		PLUMBING			
420		Fixture trim, 2 WC, 3 lavs., 1 sink, 1 SS, 1 D.F.	no. 8	60	CI 50 Stl 4 Br 4 Ru 2
430		CI pipe & fittings, size 4"	1f. 10		
		size 3"	1f. 15		
		size 2"	1f. 50		
		Subtotal pipe & fittings	1f. 75	490	CI 490
		(If lead is used for roughing make-up of soil pipe, the sub- total of 490 pounds will change to . . .		493	CI 463, lead 30)

\* Under Rough Hardware, 85% of steel is classed as "A" product

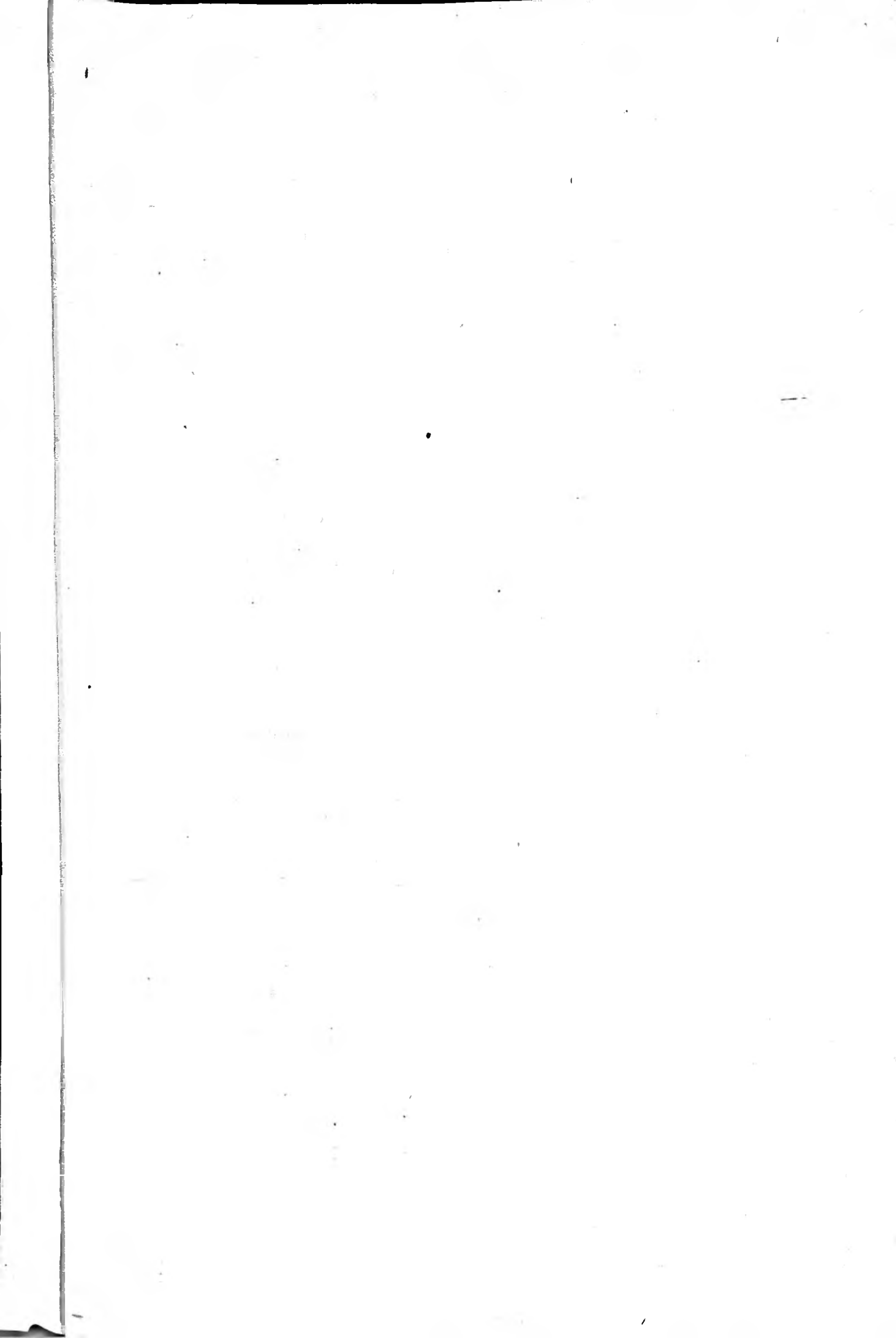
Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Galv. steel pipe & fittings			
		Pipe size 1-1/2"	lf. 35		
		Pipe size 1-1/4"	lf. 30		
		Subtotal pipe & fittings	lf. 65	202	CI 27, steel 167, zinc 8
		(If lead is used for roughing make-up of waste pipe, the subtotal of 202 pounds will <u>change</u> to . . . . .)	. . . . .	211	CI 31 Stl 152 Zn 8 Lead 20)
		Calking and flashing lead		130	Lead 130
		Misc. hangers, etc.		20	Steel 20
440		Galv. water pipe & fittings			
		Pipe size 3/8"	lf. 10		
		Pipe size 1/2"	lf. 110		
		Pipe size 3/4"	lf. 25		
		Subtotal galv. pipe & ftgs.	lf. 145	167	CI 19, steel 141, zinc 7
		Pipe size 1"	lf. 20	45	CI 6, steel 37, zinc 2
		Misc. hangers, etc.		9	Steel 9
		Valves and cocks	no. 4	8	CI 2, brass 6
450		Water heaters			
	ACD	35 GPH/100° rise coal heater	no. 1	145	CI 145
	ILM	20 GPH/100° rise auto. gas stg. heater	no. 1	145	CI 7 Stl 132 Zn 3 Br 3
	EGH	30 GPH/100° rise auto. oil stg. heater	no. 1	225	CI 12 Stl 206 Zn 4 Br 3
	ACB	30 gallon storage tank	no. 1	70	Steel 67, zinc 3
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Temperature relief valve	no. 1	1	Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Thermometer	no. 1	2	CI 1, brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7, steel 3, brass 1
480		Black gas pipe & fittings			
	ILM	Pipe size 1-1/2"	lf. 15		
		Pipe size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	60	CI 11, steel 49
	ILM	Misc. hangers, etc.		5	Steel 5
	ILM	Valves and cocks	no. 2	8	Brass 8
	U	Black gas pipe & fittings			
		Pipe size 3/4"	lf. 14	19	CI 2, steel 17
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	+15° coal Btu 250,000	no. 1	1852	CI 1750, steel 102
	C	0° coal Btu 286,000	no. 1	1852	CI 1750, steel 102
	D	-20° coal Btu 300,000	no. 1	1852	CI 1750, steel 102
	EI	+15° oil & gas Btu 250,000	no. 1	1752	CI 1650, steel 102
	GL	0° oil & gas Btu 286,000	no. 1	1752	CI 1650, steel 102
	HM	-20° oil & gas Btu 300,000	no. 1	1752	CI 1650, steel 102
		Blower 3000 CFM	no. 1	264	CI 25, steel 239
		Motor 1 HP and controls	no. 1	80	CI 30 Stl 30 Cu 16 Ru 4
		Propeller type exhaust fan-10" size complete with auto. shutter	no. 1	22	CI 5, steel 16, cu 1
		Ducts - metal allowed for relief duct, 3 l.f. at furnace, ftgs. fasteners, hangers, etc.	lf. 150	225	Steel 225
		Registers and grilles	no. 18	80	Steel 80

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
550	EGH	Firing equipment - furnace			
		+15°, 0° & -20° oil burner GPH 4	no. 1	155	CI 124, steel 23, cu 8
	ILM	+15°, 0° & -20° gas burner 430,000 Btu input	no. 1	279	CI 245, steel 28, cu 6
	EGH	Oil pipe, fittings & valves, 2" and 3/4"	lf. 90	223	CI 38, <u>steel 175</u> , cu 10
560	EGH	Reinforcing steel - oil tank		15	<u>Steel 15</u>
		Control equipment			
		Relay	no. 1	7	Steel 6, copper 1
	ACD	Damper regulator	no. 1	8	Steel 7, copper 1
570		Thermostats	no. 4	4	Steel 3, copper 1
		Breeching-flue conn. 10" dia.	lf. 10	75	Steel 75
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	580	CI 400, steel 180
	U	Gas range	no. 1	400	CI 220, steel 170, cu 10
	V	Oil range with self contained tank	no. 1	470	CI 320, steel 140, cu 10
		Flue connection			
	W	For coal range, 7" dia.	lf. 5	15	Steel 15
		Refrigerator 8 cu. ft. (select type to be used)			
	Ice	no. 1	12	Steel 10, zinc 2	
	Mechanical	no. 1	350	CI 35, stl 290, cu .25	

TOTAL WEIGHTS OF CONTROLLED MATERIALS - 'A' PRODUCTS:

(All underlined weights in the foregoing list)

STRUCTURE: Constant	60	Steel 60
Variant X-1	988	Steel 988
Variant X-2	875	Steel 875
ELECTRICAL: Constant	22	Copper 22
Variant EGH	1	Copper 1
PLUMBING: Constant	339	Steel 339
Variant ILM	49	Steel 49
Variant U	17	Steel 17
HEATING: Constant	225	Steel 225
Variant EGH	190	Steel 190
TOTAL CONSTANT	646	Steel 624, copper 22





CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Community Building No. 303-A  
Heating System: Forced Warm Air  
Construction: Wood frame walls - 1 story - framed wood or concrete floors

-WPB Approved List-

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire		75	Steel 75
240		Insect screen (1/2 screens)	sf. 490	64	Steel 58, zinc 6
260		Sheet metal, flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		3	Zinc 3
290		Builders hardware			
		Doors - outside	no. 7		
		Doors - inside	no. 22		
		Windows	no. 38		
		Fire exit bolts	no. 5		
		Door closers	no. 14		
		Coal doors	no. 1		
		Fire doors	no. 2		
		Misc. cab. & wicket hdw.	no. 30		
		Total builders hardware		425	Steel 404, brass 21
		Rough Hardware *			
		Nails, straps, etc.			
	X-1	Plain		1584	Steel 1584
	X-1	Galvanized		176	Steel 158, zinc 18
	X-2	Plain		1397	Steel 1397
	X-2	Galvanized		154	Steel 139, zinc 15
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN Panelboards	no. 1	5	Steel 4.5, copper 0.5
		Cir. 10 - 30A - 1P	no. 1	11	Steel 9, copper 2
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, copper 0.5
330		Conductors (equiv. l.f. single wire)			
		#14 wire	lf 1480	25	Copper 25
	EGH	#14 wire	lf. 60	1	Copper 1
		# 8 wire	lf. 100	5	Copper 5
340		Outlet boxes - nonmetallic	no. 48		
350		Switches	no. 6	0.2	Steel 0.1, copper 0.1
		Receptacles	no. 10	0.3	Steel 0.15, copper 0.15
360		Straps, misc.		4	Steel 4
370		Solder		2	Solder 2
380		Fixtures	no. 32	8	Steel 6, copper 2
400		PLUMBING			
420		Fixture trim, 5WC, 6 lavs., 2 sinks, 1 S.S., 1 D.F.	no. 15	124	CI 108, stl 7, Br 7, Ru 2
430		CI pipe & fittings, size 4"	lf. 30		
		size 3"	lf. 30		
		size 2"	lf. 70		
		Subtotal pipe & fittings	lf. 130	1000	CI 1000
		(If lead is used for roughing make-up of soil pipe, the subtotal of 1000 pounds will change to . . . . .)		998	CI 923, lead 75)

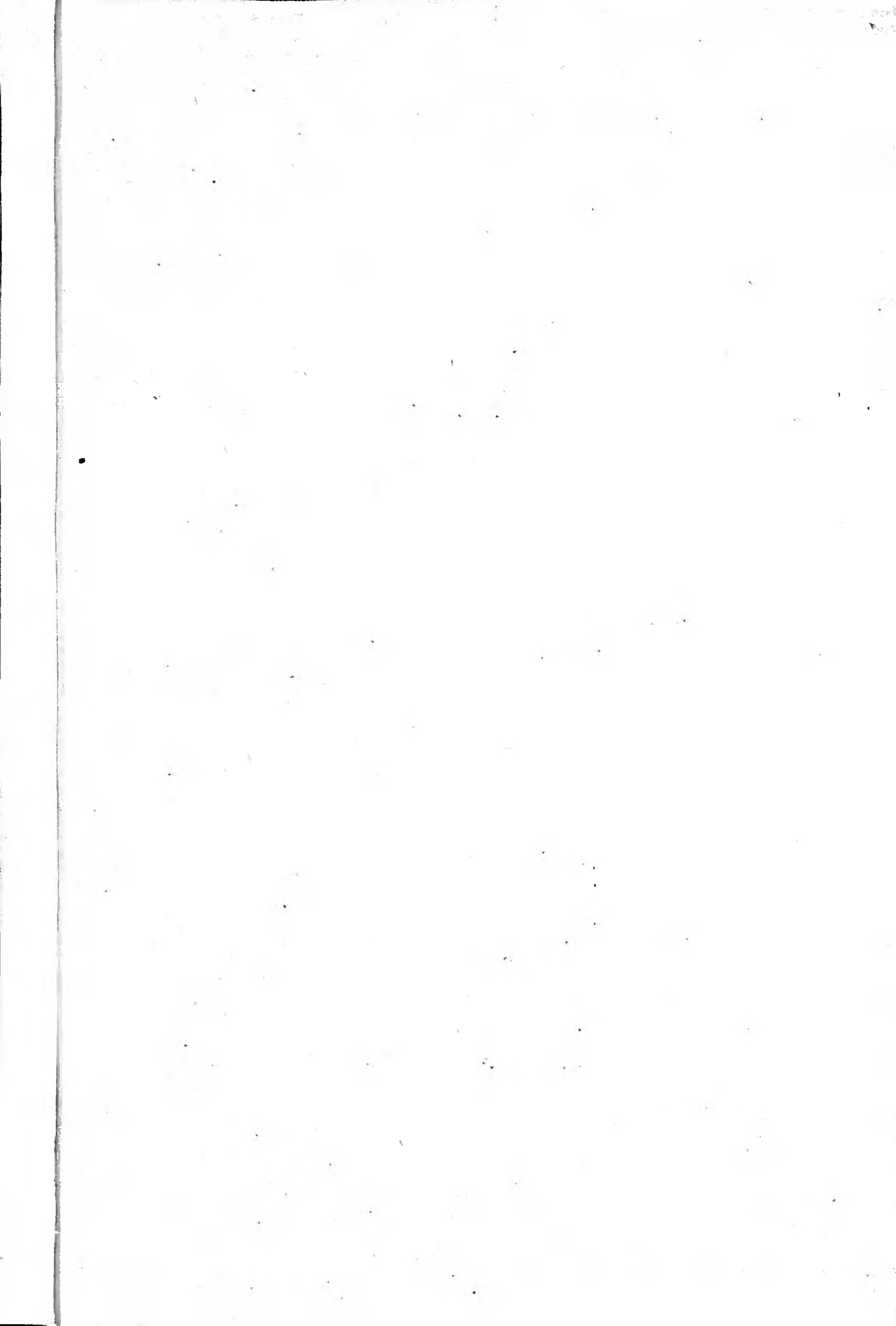
\* Under Rough Hardware, 85% of steel is classed as "A" Product

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Galv. steel pipe & fittings Size 1-1/2"	lf. 45		
		Size 1-1/4"	lf. 21		
		Subtotal pipe & fittings (If lead is used for roughing make-up of waste pipe, the subtotal of 212 pounds will change to . . . . .)	lf. 66	212	CI 28, <u>stl.174</u> , zn 10
		Calcking and flashing lead		224	CI 23 Stl 166 Zn 8 Lead 27
		Misc. hangers, etc.		200	Lead 200
440		Galv. water pipe & fittings		30	Steel 30
		Pipe size 3/8"	lf. 10		
		Pipe size 1/2"	lf. 110		
		Pipe size 3/4"	lf. 100		
		Subtotal pipe & fittings	lf. 220	272	CI 25, <u>stl 236</u> , zn 11
		Pipe size 1"	lf. 45	88	CI 7, <u>stl 77</u> , zn 4
		Misc. hangers, etc.		10	Steel 10
		Valves and cocks	no. 4	8	CI 2, brass 6
450		Water Heaters			
	ACD	35 GPH/100° rise coal heater	no. 1	145	CI 145
	ILM	20 GPH/100° rise auto. gas storage heater, 45 gal. tank	no. 1	390	CI 25, <u>stl 353</u> , zn 8, Br 4
	EGH	50 GPH/100° rise auto. oil storage heater, 35 gal. tank	no. 1	540	CI 200 Stl 328 Zn 8 Br 4
	ACD	66 gallon storage tank	no. 1	154	Steel 140, zinc 14
	ACD	Flue pipe, 24 gage		20	Steel 20
	E-M	Flue pipe, 24 gage		15	Steel 15
460		Control Equipment			
		Thermometer	no. 1	2	CI 1, brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 Stl 3 Brass 1
480		Black gas pipe & fittings			
		Size 2"	lf. 15		
		Size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	82	CI 15, <u>steel 67</u>
	ILM	Misc. hangers, etc.		8	Steel 8
	ILM	Valves and cocks	no. 2	13	Brass 13
	U	Black gas pipe & fittings	lf. 14	19	CI 2, <u>steel 17</u>
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	+15° coal Btu 400,000	no. 1	2443	CI 2300, steel 143
	C	0° coal Btu 460,000	no. 1	2957	CI 2800, steel 157
	D	-20° coal Btu 470,000	no. 1	2957	CI 2800, steel 157
	EI	+15° oil & gas Btu 400,000	no. 1	2313	CI 2170, steel 143
	GL	0° oil & gas Btu 460,000	no. 1	2807	CI 2650, steel 157
	HM	-20° oil & gas Btu 470,000	no. 1	2807	CI 2650, steel 157
		Blower 4500 CFM	no. 1	264	CI 25, steel 239
		Motor 1-1/2 HP & controls	no. 1	110	CI 41 Stl 41 Cu 22 Ru 6
		Propeller type exhaust fan-- 10" size, complete with auto. shutter	no. 1	22	CI 5, steel 16, cu 1
		Ducts, metal allowed for relief duct, 3 l.f. at furnace, and ftgs. fastenings, hangers, etc.	lf. 200	300	<u>Steel 300</u>
		Registers and grilles	no. 30	120	<u>Steel 120</u>

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
550	EGH I	Firing Equipment - Furnace			
		+15, 0 & -20° oil burner GPH 5	No. 1	250	CI 200, steel 38, cu 12
	EGH I	+15° gas burner 560,000 Btu input	no. 1	272	CI 239, steel 27, cu 6
		0° & -20° gas burner, 672,000 Btu input	no. 1	292	CI 257, steel 29, cu 6
EGH		Oil pipe, fittings & valves, 2" and 3/4"	lf. 90	223	CI 38, steel 175, cu 10
560	EGH	Reinforcing steel for oil tank		15	<u>Steel 15</u>
		Control Equipment			
		Relay	no. 1	7	Steel 6, cu 1
	ACD	Damper regulator	no. 1	8	Steel 7, cu 1
570		Thermostats	no. 4	4	Steel 3, cu 1
		Breeching-flue conn. 12" dia.	lf. 10	90	Steel 90
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal Range	no. 1	580	CI 400, steel 180
	U	Gas range	no. 1	400	CI 220, steel 170, cu 10
	V	Cil range - with self contained tank	no. 1	470	CI 320, steel 140, cu 10
	W	Flue connection			
		For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 25 cu.ft. (select type to be used)			
		Ice	no. 1	60	Steel 55, zinc 5
		Mechanical	no. 1	650	CI 70 Steel 500 Cu 80
	Dishwashing sink	no. 1	230	CI 15, steel 205, zn 10	
	Sink	no. 1	109	CI 4, steel 100, zinc 5	

**TOTAL WEIGHTS OF CONTROLLED MATERIALS - "A" PRODUCTS:**  
(All underlined weights in the foregoing list)

STRUCTURE: Constant	75	Steel 75
Variant X-1	1481	Steel 1481
Variant X-2	1305	Steel 1305
ELECTRICAL: Constant	30	Copper 30
Variant EGH	1	Copper 1
PLUMBING: Constant	487	Steel 487
Variant ILM	67	Steel 67
Variant U	17	Steel 17
HEATING: Constant	300	Steel 300
Variant EGH	190	Steel 190
TOTAL CONSTANT	892	Steel 862, Copper 30



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS - Project Facilities Element: Community Building No. 304  
Heating System: Forced Warm Air  
Construction: Wood frame walls - 1 story - framed wood or concrete floors

-WPB Approved List-

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire etc.		72	Steel 72
240		Insect screen (1/2 screen)	sf. 390	51	Steel 46 Zinc 5
260		Sheet metal flashings, chimney only		12	Steel 10 Zinc 2
280		Glazing points		3	Zinc 3
290		Builders hardware			
		Doors - outside	no. 7		
		Doors - inside	no. 19		
		Windows	no. 33		
		Fire exit bolts	no. 5		
		Door closers	no. 8		
		Coal doors	no. 1		
		Fire doors	no. 1		
		Misc. cab. & wicket hardware	no. 20		
		Total builders hardware		300	Steel 283 Brass 17
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		1293	Steel 1293
	X-1	Galvanized		144	Steel 130 Zinc 14
	X-2	Plain		1135	Steel 1135
	X-2	Galvanized		125	Steel 113 Zinc 12
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN	no. 1	5	Steel 4.5 Cu 0.5
		Panelboards:			
		Cir. 8 - 30A - 1P	no. 1	9	Steel 7.5 Cu 1.5
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5 Cu 0.5
330		Conductors (equiv. lf. single wire)			
		#14 wire	lf. 1840	24	Copper 24
	EGH	#14 wire	lf. 60	1	Copper 1
		# 8 wire	lf. 100	5	Copper 5
340		Outlet boxes - nonmetallic	no. 46		
350		Switches	no. 8	0.25	Steel 0.13 Cu 0.12
		Receptacles	no. 10	0.3	Steel 0.15 Cu 0.15
360		Straps, misc.		4	Steel 4
370		Solder		2	Solder 2
380		Fixtures	no. 28	7	Steel 5.5 Cu 1.5
400		PLUMBING			
420		Fixture trim, SWC, 3 lavs., 1 sink, 1 S.S., 1 D.F.	no. 10	96	CI 81 Stl 8 Br 5 Ru 2
430		CI pipe & ftgs., size 4"	lf. 10		
		size 3"	lf. 10		
		size 3"	lf. 70		
		size 2"	lf. 90	660	CI 660
		Subtotal pipe & fittings (If lead is used for roughing make-up of soil pipe, the sub-total of 660 lbs. will change to. . . . .)		612	CI 522 Lead 90)

\*Under Rough Hardware, 85% of steel is classed as "A" Product

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Galv. steel pipe & fittings			
		Pipe size 1-1/2"	lf. 45		
		Pipe size 1-1/4"	lf. 40		
		Subtotal pipe & fittings	lf. 85	258	CI 32 <u>Stl 215</u> Zn 11
		(If lead is used for roughing make-up of waste pipe, the subtotal of 258 lbs. will <u>change to</u> . . . . .)		270	CI 38 <u>Stl 200</u> Zn 11 Lead 21)
		Calking and flashing lead		165	Lead 165
		Misc. hangers, etc.		25	Steel 25
440		Galv. water pipe & fittings			
		Pipe size 3/8"	lf. 20		
		Pipe size 1/2"	lf. 150		
		Pipe size 3/4"	lf. 25		
		Subtotal pipe & fittings	lf. 195	218	CI 24 <u>Stl 185</u> Zn 9
		Pipe size 1"	lf. 30	59	CI 6 <u>Stl 51</u> Zn 2
		Misc. hangers, etc.		14	Steel 14
		Valves and cocks	no. 4	8	CI 2 Brass 6
450		Water Heaters			
	ACD	35 GPH/100 deg. rise coal htr.	no. 1	145	CI 145
	IIM	20 GPH/100 deg. rise auto storage gas heater	no. 1	145	CI 7 <u>Stl 132</u> Br 3 Zn 3
	EGH	30 GPH/100 deg. rise auto. storage oil heater	no. 1	225	CI 12 <u>Stl 206</u> Br 3 Zn 4
	ACD	30 gallon storage tank	no. 1	70	Steel 67 Zinc 3
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Temperature relief valve	no. 1	1	Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Thermometer	no. 1	2	CI 1 Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 <u>Steel 3</u> Brass 1
480		Black gas pipe & fittings			
		Pipe size 1-1/2"	lf. 15		
		Pipe size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	60	CI 11 <u>Steel 49</u>
	IIM	Misc. hangers, etc.		5	Steel 5
	IIM	Valves and cocks	no. 2	9	Brass 9
	U	Black gas pipe & fittings			
		Pipe size 3/4"	lf. 14	19	CI 2 <u>Steel 17</u>
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	+15° coal Btu 300,000	no. 1	1852	CI 1750 <u>Steel 102</u>
	C	0° coal Btu 345,000	no. 1	2233	CI 2100 <u>Steel 133</u>
	D	-20° coal Btu 360,000	no. 1	2233	CI 2100 <u>Steel 133</u>
	HI	+15° oil & gas Btu 300,000	no. 1	1752	CI 1650 <u>Steel 102</u>
	GL	0° oil & gas Btu 345,000	no. 1	2133	CI 2000 <u>Steel 133</u>
	HM	-20° oil & gas Btu 360,000	no. 1	2133	CI 2000 <u>Steel 133</u>
		Blower 3600 CFM	no. 1	264	CI 25 <u>Steel 239</u>
		Motor 1-1/2 HP and controls	no. 1	110	CI 41 <u>Stl 41</u> Cu 22 <u>Br</u>
		Propeller type exhause fan-10" size complete with auto. shutter	no. 1	22	CI 5 <u>Steel 16</u> Cu 1
		Ducts, metal allowed for relief duct, 3 lf. at furnace, ftgs., fasteners, hangers, etc.	lf. 175	275	<u>Steel 275</u>
		Registers and grilles	no. 20	80	<u>Steel 80</u>

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
550	EGH	Firing Equipment - Furnace ‡15°, 0° & -20° oil burner GPH 4	no. 1	155	CI 124 Steel 23 Cu 8
	ILM	‡15°, 0° & -20° gas burner Btu input 520,000	no. 1	272	CI 239 Steel 27 Cu 6
	EGH	Oil pipe, fittings & valves, 2" and 3/4"	lf. 90	223	CI 38 Steel 175 Cu 10
	EGH	Reinforcing steel for oil tank		15	Steel 15
560		Control Equipment			
		Relay	no. 1	7	Steel 6 Cu 1
	ACD	Damper regulator Thermostats	no. 1 no. 4	8 4	Steel 7 Cu 1 Steel 3 Cu 1
570		Breeching - flue conn. 10" dia.	lf. 10	75	Steel 75
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	580	CI 400 Steel 180
	U	Gas range	no. 1	400	CI 220 Steel 170 Cu 10
	V	Oil range with self-contained tank	no. 1	470	CI 320 Steel 140 Cu 10
	W	Flue connection For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 8 cu. ft. (Select type to be used)			
	Ice Mechanical	no. 1	12	Steel 10 Zinc 2	
		no. 1	350	CI 35 Steel 290 Cu 25	

TOTAL WEIGHTS OF CONTROLLED MATERIALS - "A" PRODUCTS:  
(All underlined weights in the foregoing list)

STRUCTURE:	Constant	72	Steel 72
	Variant X-1	1210	Steel 1210
	Variant X-2	1061	Steel 1061
ELECTRICAL:	Constant	29	Copper 29
	Variant EGH	1	Copper 1
PLUMBING:	Constant	451	Steel 451
	Variant ILM	49	Steel 49
	Variant U	17	Steel 17
HEATING:	Constant	275	Steel 275
	Variant EGH	190	Steel 190





CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS - Project Facilities Element: Community Building No. 304A  
Heating System: Forced Warm Air  
Construction: Wood Frame Walls - 1 story - Framed Wood or Concrete Floors

- WPB Approved List -

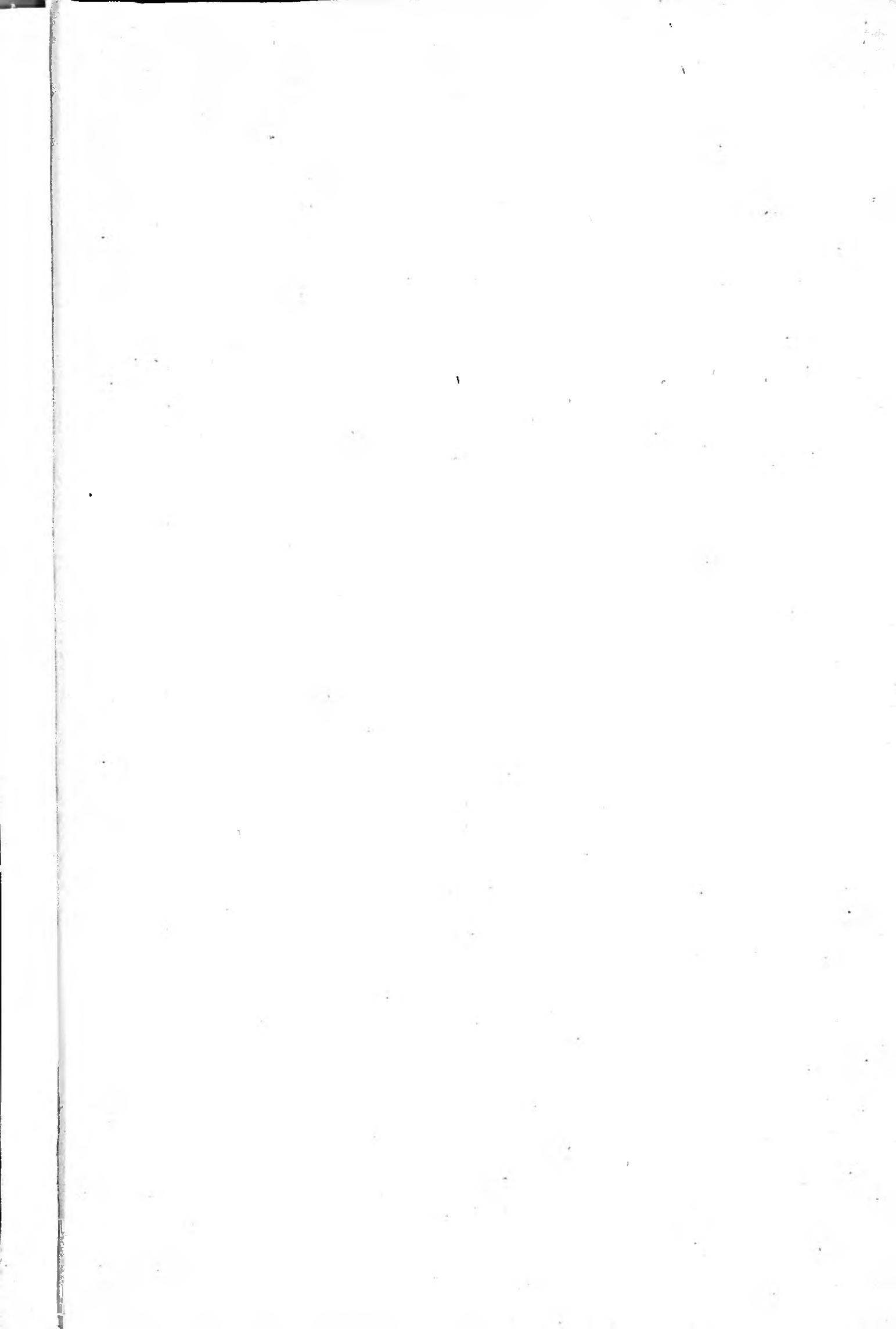
Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire, etc.		90	Steel 90
240		Insect screen (1/2 screens)	sf. 535	70	Steel 63, zinc 7
260		Sheet metal, flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		3	Zinc 3
290		Builders hardware			
		Doors - outside	no. 9		
		Doors - inside	no. 21		
		Windows	no. 40		
		Fire exit bolts	no. 7		
		Door closers	no. 16		
		Coal doors	no. 1		
		Fire doors	no. 2		
		Misc. cab. & wicket hardware	no. 30		
		Total builders hardware		461	Steel 438, brass 23
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		1740	Steel 1740
	X-1	Galvanized		193	Steel 174, zinc 19
	X-2	Plain		1525	Steel 1525
	X-2	Galvanized		170	Steel 153, zinc 17
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN Panelboards:	no. 1	5	Steel 4.5, cu 0.5
		Cir. 10 - 30A - 1P	no. 1	11	Steel 9, cu 2
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	lf. 2320	30	Copper 30
	EGH	#14 wire	lf. 60	1	Copper 1
		# 6 wire	lf. 100	8	Copper 8
340		Outlet boxes (nonmetallic)	no. 58		
350		Switches	no. 10	0.3	Steel 0.15, cu 0.15
		Receptacles	no. 11	0.3	Steel 0.15, cu 0.15
360		Straps, misc.		5	Steel 5
370		Solder		2	Solder 2
380		Fixtures	no. 38	9.5	Steel 7, cu 2.5
400		PLUMBING			
420		Fixture trim - 7 W.C., 7 Lavs., 1 Ur., 1 S.S., 2 Sinks, 1 D.F.	no. 19	145	GI 123 Stl 11 Br 8 Ru 3
430		GI pipe & fittings - size 4"	lf. 25		
		size 3"	lf. 25		
		size 2"	lf. 70		
		Subtotal pipe and fittings	lf. 120	1050	GI 1050
		(If lead is used for roughing make-up of soil pipe, the subtotal of 1050 lbs. will change to . . . . .)		1062	GI 972, lead 90)
		*Under Rough Hardware, 85% of Steel is classified as "A"			



Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont.)		Registers and grilles	no. 26	110	Steel 110
550		Firing Equipment - Furnace			
	EGH	+15°, 0°, & -20° oil burner GPH 6	no. 1	250	CI 200, Stl 38, Cu 12
	I	+15° gas burner Btu input 610,000	no. 1	292	CI 257, Stl 129, Cu 6
	LM	0° & -20° gas burner Btu input 720,000	no. 1	311	CI 274, Stl 31, Cu 6
	EGH	Oil pipe, ftgs. & valves 2" & 3/4"	lf. 90	223	CI 38, <u>Stl 175</u> , Cu 10
	EGH	Reinforcing steel for oil tank		15	<u>Steel 15</u>
560		Control Equipment			
		Relay	no. 1	7	Steel 6, copper 1
	ACD	Damper regi;atpr	no. 1	8	Steel 7, copper 1
		Thermostats	no. 4	4	Steel 3, copper 1
570		Breeching - flue conn. 12" dia.	lf. 10	90	Steel 90
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	580	CI 400, Steel 180
	U	Gas range	no. 1	400	CI 220, Stl 170, Cu 10
	V	Oil range with self-contained tank	no. 1	470	CI 320, Stl 140, Cu 10
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 25 cu. ft. (Select type to be used)			
		Ice	no. 1	60	Steel 55, zinc 5
		Mechanical	no. 1	650	CI 70, Stl 500, Cu 80
		Dishwashing sink	no. 1	230	CI 15, Stl 205, Zn 10
		Sink	no. 1	109	CI 4, Stl 100, Zn 5

TOTAL WEIGHT OF CONTROLLED MATERIALS - "A" PRODUCTS  
(All underlined weights in the foregoing list)

STRUCTURE: Constant	90	Steel 90
Variant X-1	1627	Steel 1627
Variant X-2	1425	Steel 1425
ELECTRICAL: Constant	38	Copper 38
Variant EGH	1	Copper 1
PLUMBING: Constant	580	Steel 580
Variant ILM	101	Steel 101
Variant U	17	Steel 17
HEATING: Constant	300	Steel 300
Variant EGH	190	Steel 190
TOTAL CONSTANT	1008	Steel 970, copper 38



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS - Project Facilities Element: Community Building No. 304-A-B  
Heating System: Forced Warm Air  
Construction: Wood Frame Walls - 1 Story - Framed Wood or Concrete Floors

- WPB Approved List -

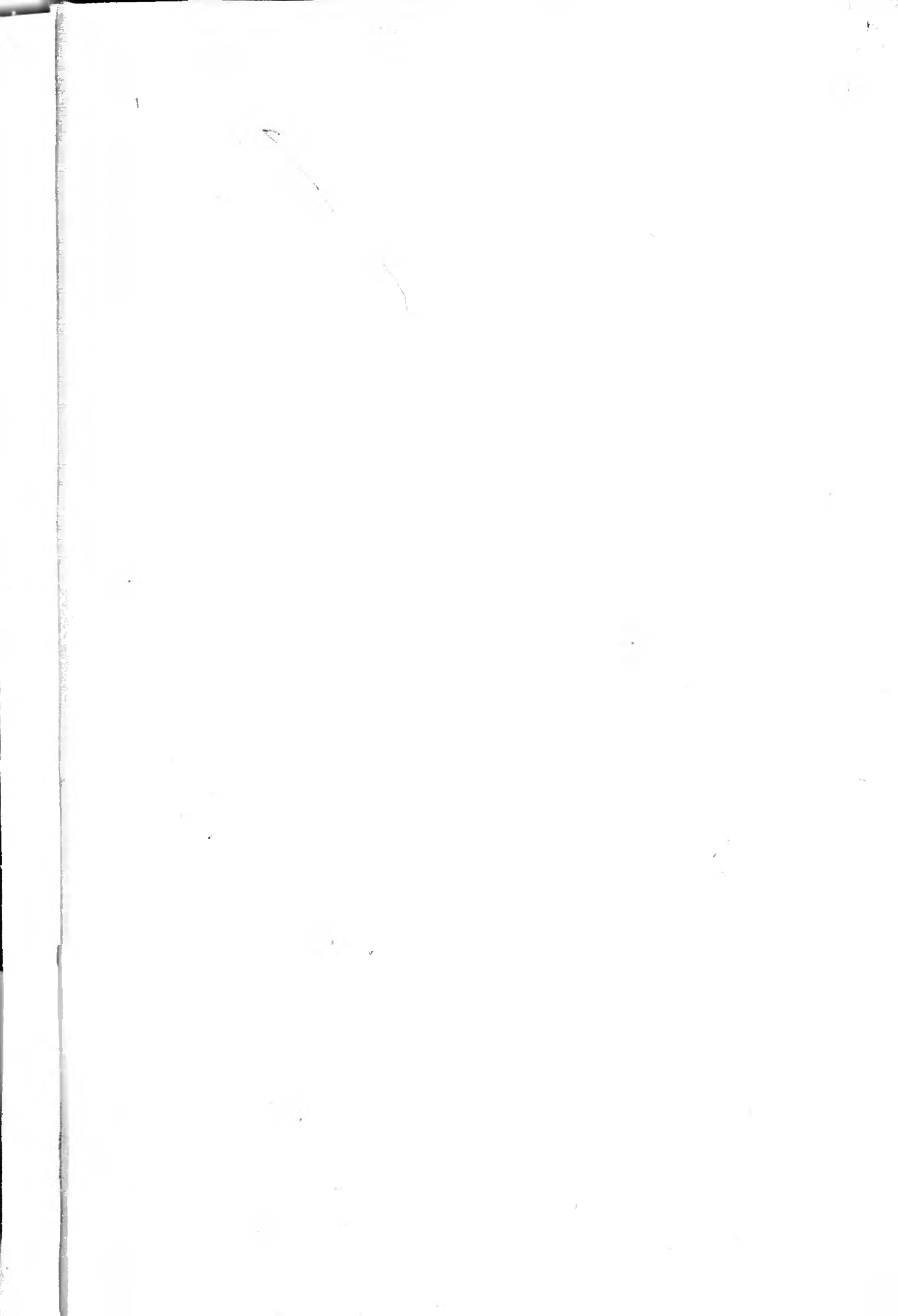
Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire, etc.		90	Steel 90
240		Insect screen (1/2 screens)	sf. 638	83	Steel 75, zinc 8
260		Sheet metal, flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		6	Zinc 6
290		Builders hardware			
		Doors - outside	no. 11		
		Doors - inside	no. 27		
		Windows	no. 49		
		Fire exit bolts	no. 9		
		Door closers	no. 20		
		Coal doors - no. 1 fire doors	no. 2		
		Misc. cab. & wicket hardware	no. 40		
		Total builders hardware		556	Steel 528, brass 28
		Rough hardware *			
		Nails, straps, etc.			
	X-1	Plain		2200	Steel 2200
	X-1	Galvanized		240	Steel 216, zinc 24
	X-2	Plain		1925	Steel 1925
	X-2	Galvanized		214	Steel 193, zinc 21
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN	no. 1	5	Steel 4.5, copper 0.5
		Panelboards:			
		Cir. 10 - 30A - 1P	no. 1	11	Steel 9, copper 2
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, copper 0.5
330		Conductors (equiv. lf. single wire)			
		#14 wire	lf. 2800	36	Copper 36
	EGH	#14 wire	lf. 60	1	Copper 1
		# 6 wire	lf. 100	8	Copper 8
340		Outlet boxes (nonmetallic)	no. 70		
350		Switches	no. 12	0.3	Steel 0.15, copper 0.15
		Receptacles	no. 12	0.3	Steel 0.15, copper 0.15
360		Straps, misc.		6	Steel 6
370		Solder		2	Solder 2
380		Fixtures	no. 46	12.5	Steel 10, copper 2.5
400		PLUMBING			
420		Fixture trim - 10 W.C., 10 Lavs., 1 Ur., 2 Sinks, 1 S.S., 1 D.F.	no. 25	193	CI 165 Stl 14 Br 10 Ru 4
430		CI pipe & fittings - size 4"	lf. 60		
		size 3"	lf. 40		
		size 2"	lf. 70		
		Subtotal pipe and fittings	lf. 170	1400	CI 1400
		(If lead is used for roughing make-up of soil pipe, the sub-total of 1400 lbs. will change to . . . . .)		1418	CI 1283, lead 135
		*Under Rough Hardware, 85% of Steel is classed as "A" Product.			

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights lbs.
430 (Cont.)		Galv. steel pipe & ftgs. - 1-1/2"	lf. 75		
		1-1/4"	lf. 41		
		Subtotal steel pipe & fittings (If lead is used for roughing make-up of waste pipe, the sub- total of 337 lbs. will <u>change</u> to	lf. 116	337	CI 38, <u>Stl 284</u> , Zn 15
		Calking and flashing lead		290	Lead 290
		Misc. hangers, etc.		50	Steel 50
440		Galv. water pipe & ftgs. - 3/8"	lf. 35		
		1/2"	lf. 195		
		3/4"	lf. 150		
		Subtotal galv. pipe & ftgs.	lf. 380	452	CI 40, <u>Stl 393</u> , Zn 19
		1"	lf. 75		
		Subtotal galv. pipe & ftgs.	lf. 75	141	CI 9, <u>Stl 126</u> , Zn 6
		Misc. hangers, etc.		28	Steel 28
		Valves and cocks	no. 8	16	CI 3, brass 13
450		Water Heaters			
	ACD	35 GPH/100 deg. rise coal htr.	no. 1	145	CI 145
	ILM	20 GPH/100 deg. rise auto. gas stg. type, 45 gal. self- contained tank	no. 1	390	CI 25 Stl 353 Br 4 Zn 8
	EGH	50 GPH/100 deg. rise auto. oil stg. type, 35 gal. self- contained tank	no. 1	540	CI 200 Stl 328 Br 4 Zn 8
	ACD	66 gallon storage tank	no. 1	154	Steel 140, Zinc 14
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Thermometer	no. 1	2	CI 1, brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7, Stl 3, Br 1
480	ILM	Black gas pipe & fittings-2-1/2" 3/4"	lf. 15		
			lf. 10		
		Subtotal pipe & fittings	lf. 25	121	CI 20, <u>Steel 101</u>
	ILM	Misc. hangers, etc.		10	Steel 10
	ILM	Valves and cocks	no. 2	14	Brass 4, CI 10
	U	Black gas pipe & fittings - 3/4"	lf. 14		
		Subtotal pipe & fittings	lf. 14	19	CI 2, <u>Steel 17</u>
	U	Misc. hangers, etc.		2	Steel 2
	U	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
530		Heater - Warm Air Furnace			
	A	+15° coal Btu 540,000	no. 1	4225	CI 3825, steel 400
	C	0° coal Btu 610,000	no. 1	5100	CI 4600, steel 500
	D	-20° coal Btu 630,000	no. 1	5100	CI 4600, steel 500
	EI	+15° oil & gas Btu 540,000	no. 1	4025	CI 3625, steel 400
	GL	0° oil & gas Btu 610,000	no. 1	4875	CI 4375, Steel 500
	HM	-20° oil & gas Btu 630,000	no. 1	4875	CI 4375, steel 500
		Blower 6100 CFM	no. 1	372	CI 30, steel 342
		Motor 2 HP & Controls	no. 2	125	CI 47 Stl 47 Cu 25 Ru 6
		Propeller type exhause fan-10" size complete with auto. shutter	no. 1	22	CI 5, Stl 16, Cu 1
		Ducts, metal allowed for relief duct, 3 l.f. at furnace, ftgs., fasteners, hangers, etc.	lf. 250	375	<u>Steel 375</u>

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont.)		Registers and grilles	no. 32	130	Steel 130
550		Firing Equipment - Furnace			
	EGH	+15°, 0° & -20° oil burner GPH 7	no. 1	250	CI 200, Stl 38, Cu 12
	I	+15° gas burner Btu input 770,000	no. 1	311	CI 274, Stl 31, Cu 6
	LM	0° & -20° gas burner Btu input 900,000	no. 1	331	CI 291, Stl 33, Cu 7
	EGH	Oil pipe, ftgs. & valves 2" & 3/4"	lf. 90	223	CI 38, <u>Stl 175</u> , Cu 10
	EGH	Reinforcing steel for oil tank		15	<u>Steel 15</u>
560		Control Equipment			
		Relay	no. 1	7	Steel 6, copper 1
	ACD	Damper regulator	no. 1	8	Steel 7, copper 1
		Thermostats	no. 4	4	Steel 3, copper 1
570		Breeching-flue conn. 15" dia.	lf. 10	100	Steel 100
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	580	CI 400, Stl 180
	U	Gas range	no. 1	400	CI 220, Stl 170, Cu 10
	V	Oil range with self-contained tank	no. 1	470	CI 320, Stl 140, Cu 10
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 35 cu. ft. (Select type to be used)			
		Ice	no. 1	70	Steel 63, zinc 7
		Mechanical	no. 1	700	CI 70, Stl 550, Cu 80
		Dishwashing sink	no. 1	230	CI 15, Stl 205, Zn 10
		Sink	no. 1	109	CI 4, Stl 100, Zn 5

TOTAL WEIGHTS OF CONTROLLED MATERIALS - "A" PRODUCTS  
(All underlined weights in the foregoing list)

STRUCTURE: Constant	90	Steel 90
Variant X-1	2053	Steel 2053
Variant X-2	1200	Steel 1800
ELECTRICAL: Constant	44	Copper 44
Variant EGH	1	Copper 1
PLUMBING: Constant	803	Steel 803
Variant ILM	101	Steel 101
Variant U	17	Steel 17
HEATING: Constant	375	Steel 375
Variant EGH	190	Steel 190
TOTAL CONSTANT	1312	Steel 1268, copper 44





CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Community Building No. 305  
Heating: Forced Warm Air  
Construction: Wood frame walls - 1 story - framed wood or concrete floors

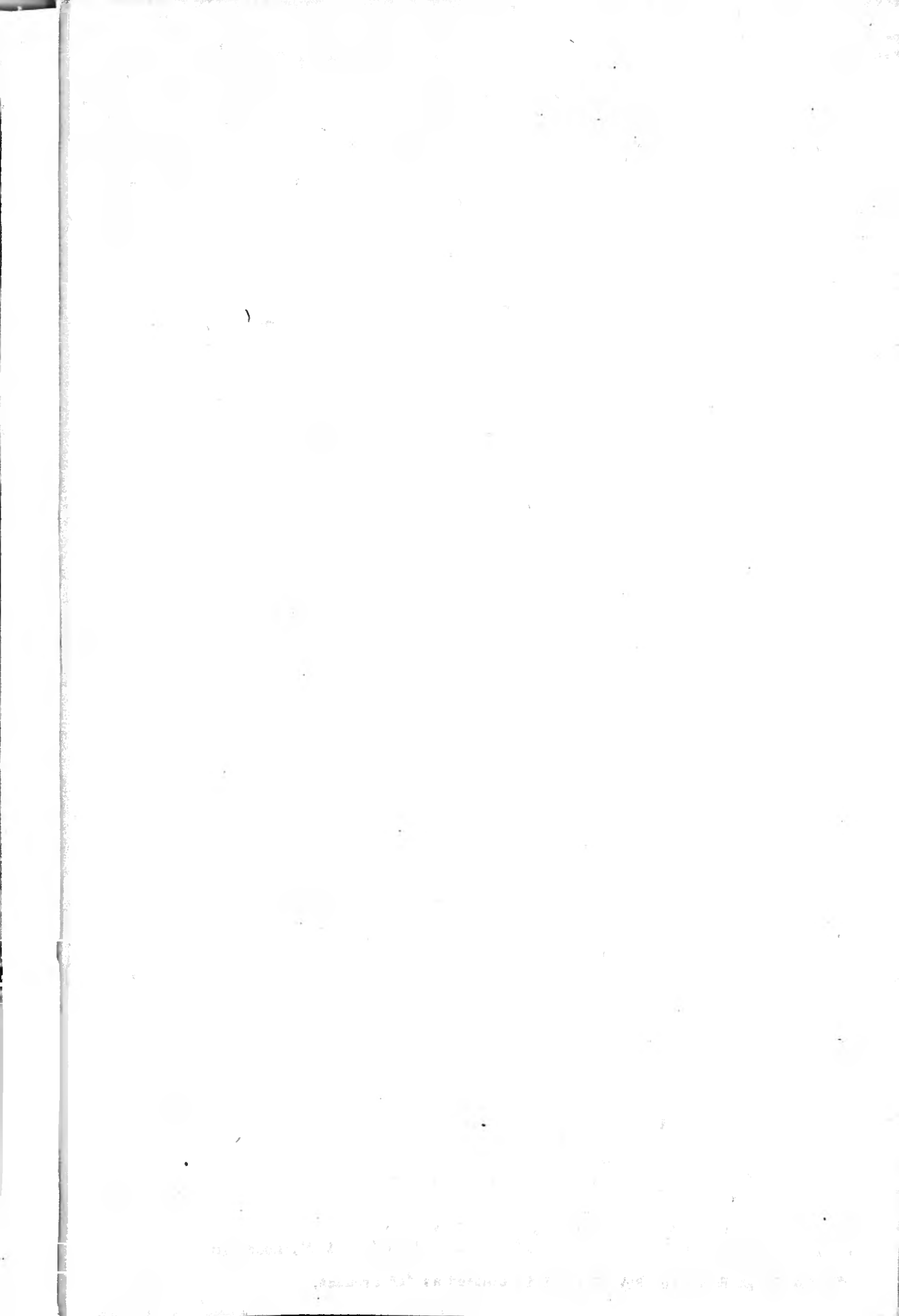
WPB APPROVED LIST

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire		100	Steel 100
240		Insect screen (1/2 Screens)	sf. 413	54	Steel 48, Zinc 6
260		Sheet metal, flashings, Chimney only		12	Steel 10, Zinc 2
280		Glazing points		3	Zinc 3
290		Builders hardware			
		Doors - outside	no. 8		
		Doors - inside	no. 27		
		Windows	no. 35		
		Fire exit bolts	no. 7		
		Door closers	no. 12		
		coal doors	no. 1		
		Fire doors	no. 1		
		Misc. cab. & wicket hdw.	no. 25		
		Total builders hardware		396	Steel 376, brass 20
		Rough Hardware*			
		Nails, straps, etc.			
	X-1	Plain		1723	Steel 1723
	X-1	Galvanized		191	Steel 172, zinc 19
	X-2	Plain		1510	Steel 1510
	X-2	Galvanized		167	Steel 151, zinc 16
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN Panelboards	no. 1	5	Steel 4.5 cu. 0.5
		Cir. 8 - 30A - 1P	no. 1	9	Steel 7.5 cu 1.5
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5 cu 0.5
330		Conductors (equiv. 1. f. single wire)			
		#14 wire	lf 2030	27	Copper 27
	EGH	#14 wire	lf. 60	1	Copper 1
		# 6 wire	lf. 100	8	Copper 8
340		Outlet boxes - nonmetallic	no. 52		
350		Switches	no. 10	0.3	Steel 0.15, cu 0.15
		Receptacles	no. 10	0.3	Steel 0.15, cu 0.15
360		Straps, misc.		5	Steel 5
370		Solder		2	Solder 2
380		Fixtures	no. 32	8	Steel 6, cu 2
400		PLUMBING			
420		Fixture trim - 5 W.C., 5 Lavs. 1Ur. 2 sinks, IS. S., 1 D.F.	no. 15	129	CI 109 Stl 10 Br 7 Ru 3
430		CI pipe & fittings, size 4"	lf. 20		
		size 3"	lf. 15		
		size 2"	lf. 55		
		Subtotal pipe & fittings	lf. 90	660	CI 660

\*Under Rough Hardware, 85% of steel is classed as "A" Product.

Crit. List. No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		(If lead is used for roughing make-up of soil pipe, the subtotal of 660 pounds will change to . . . . .)		675	CI 555, lead 120)
		Galv. steel pipe & fittings			
		Size 1-1/2"	lf. 45		
		Size 1-1/4"	lf. 45		
		Subtotal pipe & fittings	lf. 90	265	CI 32, Steel 222 zn 11
		(If lead is used for roughing make-up of waste pipe, the subtotal of 265 pounds will change to . . . . .)		278	CI 32 Stl. 208 Zn 11 Lead 27
		Calking and flashing lead		200	Lead 200
		Misc. hangers, etc.		28	Steel 28
440		Galv. water pipe and fittings			
		Size 3/8"	lf. 30		
		Size 1/2"	lf. 160		
		Size 3/4"	lf. 25		
		Subtotal pipe & fittings	lf. 215	236	CI 26, Steel 200, zn 10
		Size 1"	lf. 40	79	CI 8, Steel 68, zn 3
		Misc. hangers, etc.		16	Steel 16
		Valves and cocks	no. 4	8	CI 2, brass 6
450		Water Heaters			
	ACD	35 GPH/100° rise coal heater	no. 1	145	CI 145
	ILM	20 GPH/100° rise auto. stg. gas heater	no. 1	145	CI 7 Stl. 132 Br 3 Zn 3
	EGH	30 GPH/100° rise auto. stg. oil heater	no. 1	225	CI 12 Stl 206 Br 3 Zn 4
	ACD	30 gallon storage tank	no. 1	70	Steel 67, zinc 3
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Thermometer	no. 1	2	CI 1, brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto, damper regulator	no. 1	11	CI 7, steel 3, brass 1
480	ILM	Black gas pipe & fittings,			
		Size 2-1/2"	lf. 15		
		Size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	121	CI 20, steel 101
	ILM	Misc. hangers, etc.		10	Steel 10
	ILM	Valves and cocks	no. 2	14	Brass 4 CI 10
	U	Black gas pipe & ftgs. 3/4"	lf. 14	19	CI 2, steel 17
	U	Valves and cocks	no. 1	3	Brass 3
	U	Misc. hangers, etc.		2	Steel 2
500		HEATING			
530		Heaters - warm air furnaces			
	A	+15° coal Btu 400,000	no. 1	2443	CI 2300, steel 143
	C	0° coal Btu 460,000	no. 1	2957	CI 2800, steel 157
	D	-20° coal Btu 480,000	no. 1	2957	CI 2800, steel 157
	EI	+15° oil & gas Btu 400,000	no. 1	2313	CI 2170, steel 143
	GL	0° oil & gas 460,000 Btu	no. 1	2807	CI 2650, steel 157
	HM	-20° oil & gas 480,000 Btu	no. 1	2807	CI 2650, steel 157
		Blower 4800 CFM	no. 1	264	CI 25, steel 239
		Motor 1-1/2 HP and controls	no. 1	110	CI 41 Stl. 41 Cu 22 Ru 6
		Propeller type exhaust fan—10" size, complete with auto. shutter	no. 1	22	CI 5, steel 16, cu 1

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont)		Ducts-metal allowed for relief duct, 3 l.f. at furnace ftgs. fasteners, hangers, etc.	lf. 200	300	Steel 300
		Registers and grilles	no. 24	100	Steel 100
550	EGH	Firing equipment - furnace +15° 0° & -20° oil burner GPH 5	no. 1	250	CI 200 steel 38 cu 12
	I	+15° gas burner 570,000 Btu input	no. 1	292	CI 257 steel 29 cu 6
	L	0° gas burner 660,000 Btu input	no. 1	292	CI 257 steel 29 cu 6
	M	-20° gas burner 700,000 Btu input	no. 1	311	CI 274 steel 31 cu 6
	EGH	Oil pipe, fittings, valves 2" and 3/4"	lf. 90	223	CI 38 steel 175 cu 10
	EGH	Reinf. steel for oil tank		15	Steel 15
560		Control Equipment			
		Relay	no. 1	7	Steel 6, cu 1
	ACD	Damper regulator	no. 1	8	Steel 7, cu 1
		Thermostats	no. 4	4	Steel 3, cu 1
570		Breeching-flue conn. 12" dia.	lf. 10	90	Steel 90
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	580	CI 400, steel 180
	U	Gas range	no. 1	400	CI 220, steel 170 cu 10
	VV	Oil range with self contained tank	no. 1	470	CI 320 steel 140 cu 10
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 8 cu. ft. (select type to be used)			
		Ice	no. 1	12	Steel 10 zinc 2
		Mechanical	no. 1	350	CI 35, steel 290 cu 25
Total Weights of Controlled Materials - "A" Products (All <u>underlined weights</u> in the foregoing list)					
STRUCTURE - Constant				100	Steel 100
Var. X-1				1610	" 1610
Var. X-2				1414	" 1414
ELECTRICAL - Constant				35	Copper 35
Var. EGH				1	" 1
PLUMBING - Constant				490	Steel 490
Var. ILM				101	" 101
" U				17	" 17
HEATING - Constant				300	" 300
Var. EGH				190	" 190
TOTAL - CONSTANT				925	" 890, Copper 35



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: FPS Project Facilities Element: Community Building No. 305A  
Heating: Forced warm air  
Construction: Wood frame walls - 1 story - framed wood or concrete floors

- WPB Approved List -

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire		100	Steel 100
240		Insect screens (1/2 screens)	sf. 565	74	Steel 67, zinc 7
260		Sheet metal, flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		4	Zinc 4
290		Builders hardware			
		Doors - outside	no. 10		
		Doors - inside	no. 30		
		Windows	no. 45		
		Fire exit bolts	no. 8		
		Door closers	no. 16		
		Coal doors	no. 1		
		Fire doors	no. 2		
		Misc. cab. & wicket hardware	no. 35		
		Total builders hardware		516	Steel 490, brass 26
		Rough hardware*			
		Nails, straps, etc.			
	X-1	Plain		2190	Steel 2190
	X-1	Galvanized		240	Steel 216, zinc 24
	X-2	Plain		1920	Steel 1920
	X-2	Galvanized		210	Steel 189, zinc 21
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN	no. 1	5	Steel 4.5, cu 0.5
		Panelboards:			
		Cir. 10 - 30A - 1P	no. 1	11	Steel 9, cu 2
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	1f 2600	34	Copper 34
	EGH	#14 wire	1f 60	1	Copper 1
		# 6 wire	1f 100	8	Copper 8
340		Outlet boxes - nonmetallic	no. 65		
350		Switches	no. 12	0.4	Steel 0.2, cu 0.2
		Receptacles	no. 11	0.4	Steel 0.2, cu 0.2
360		Straps, misc.		6	Steel 6
370		Solder		2	Solder 2
380		Fixtures	no. 42	10.5	Steel 8, cu 2.5
400		PLUMBING			
420		Fixture trim (9 w.c., 9 lavs., 1 ur., 2 sinks, 1SS, 1 D.F.)	no. 23	170	CI 143 Stl 13 Br 10 Rn 4
430		CI pipe & fittings, size 4"	1f. 30		
		size 3"	1f. 25		
		size 2"	1f. 75		
		Subtotal pipe & fittings (If lead is used for roughing make-up of soil pipe, the subtotal of 1130 pounds will change to . . . . .)	1f. 130	1130	CI 1130
				1144	CI 1024, Lead 120)

\*Under Rough Hardware, 85% of steel is classed as "A" Product.

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Galv. steel pipe & fittings			
		Size 1-1/2"	lf. 55		
		Size 1-1/4"	lf. 39		
		Subtotal steel pipe & fittings	lf. 94	294	CI 46 <u>steel 236</u> zn 12
		(If lead is used for roughing make-up of waste pipe, the subtotal of 294 pounds will change to . . . . .)		311	CI 48 Stl 216 Zn 14 Lead 36
		Calking and flashing lead		240	Lead 240
		Misc. hangers, etc.		28	Steel 28
440		Galv. water pipe & ftgs. 3/8"	lf. 30		
		1/2"	lf. 160		
		3/4"	lf. 100		
		Subtotal pipe & fittings	lf. 290	341	CI 32 <u>steel 295</u> zn 14
		Galv. water pipe & ftgs. 1"	lf. 55	108	CI 9 <u>steel 94</u> zn 5
		Misc. hangers, etc.		20	Steel 20
		Valves and cocks	no. 4	8	CI 2, brass 6
450		Water Heaters			
	ACD	35 GPH/100° rise coal htr.	no. 1	145	CI 145
	ILM	20 GPH/100° rise auto. stg. gas heater with 45 gallon self contained tank	no. 1	390	CI 25 Stl 353 Br 8 Zn 4
	EGH	50 GPH/100° rise auto. stg. oil heater with 35 gallon self contained tank	no. 1	540	CI 200 Stl 328 Br 4 Zn 8
	ACD	30 gallon storage tank	no. 1	154	Steel 140, zinc 14
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Thermometer	no. 1	2	CI 1, brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	Brass 1, CI 7, steel 3
480	ILM	Black gas pipe & fittings			
		Size 3"	lf. 15		
		Size 3/4"	lf. 10		
		Subtotal pipe & fittings	lf. 25	158	CI 30, <u>steel 128</u>
	ILM	Misc. hangers, etc.		12	Steel 12
	ILM	Valves and cocks	no. 2	18	CI 12, brass 6
	U	Black gas pipe & fittings 3/4"	lf. 14	19	CI 2, <u>steel 17</u>
	U	Valves and cocks	no. 1	3	Brass 3
	U	Misc. hangers, etc.		2	Steel 2
500		HEATING			
530		Heaters - Warm Air Furnaces			
	A	†15° coal Btu 500,000	no. 1	4225	CI 3825, steel 400
	C	° coal Btu 570,000	no. 1	5100	CI 4600, steel 500
	D	-20° coal Btu 592,000	no. 1	5100	CI 4600, steel 500
	HI	†15° oil & gas Btu 500,000	no. 1	4025	CI 3625, steel 400
	GL	° oil & gas Btu 570,000	no. 1	4875	CI 4375, steel 500
	EM	-20° oil & gas Btu 592,000	no. 1	4875	CI 4375, steel 500
		Blower 6000 CFM	no. 1	372	CI 30, steel 342
		Motor 2 HP and controls	no. 1	125	CI 47 Stl 47 Cu 25 Rn 6
		Propeller type exhaust fan-- 10" size complete with auto. shutter	no. 1	22	CI 5, steel 16, cu 1
		Ducts, metal allowed for relief duct, 3 l.f. at furnace, fittings, fasteners, hangers	lf. 250	375	<u>Steel 375</u>
		Registers and grilles	no. 30	120	Steel 120

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
550	EGH	Firing Equipment - furnace +159 0° & -20° oil burner GPH 6	no. 1	250	CI 200 steel 38 cu 12
	I	+15° gas burner 720,000 Btu input	no. 1	311	CI 274 steel 31 cu 6
	LM	0° & -20° gas burner 850,000 Btu input	no. 1	331	CI 291, steel 33, cu 7
	EGH	Oil pipe, fittings & valves, 2" and 3/4"	lf. 90	223	CI 38 <u>steel 175</u> cu 10
	EGH	Reinf. steel for oil tank		15	<u>Steel 15</u>
560		Control Equipment			
		Relay	no. 1	7	Steel 6, cu 1
	ACD	Damper regulator	no. 1	8	Steel 7, cu 1
		Thermostats	no. 4	4	Steel 3, cu 1
570		Breeching-flue conn. 15" dia.	lf. 10	100	Steel 100
600		HOUSEHOLD EQUIPMENT			
		Cooking Equipment			
	W	Coal range	no. 1	580	CI 400, steel 180
	U	Gas range	no. 1	400	CI 220, steel 170, cu 10
	V	Oil range with self con- tained tank	no. 1	470	CI 320, steel 140, cu 10
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 25 cu. ft. (select type to be used)			
		Ice	no. 1	60	Steel 55, zinc 5
		Mechanical	no. 1	650	CI 70 Steel 500, cu 80
		Dishwashing sink	no. 1	230	CI 15, Steel 205, Zn 10
		Sink	no. 1	109	CI 4 Steel 100 Zn 5
<b>Total Weights of Controlled Materials - "A" Products</b> (All <u>underlined weights</u> in the foregoing list)					
STRUCTURE - Constant				100	Steel 100
Var. X-1				2045	Steel 2045
Var. X-2				1793	Steel 1793
ELECTRICAL - Constant				42	Copper 42
Var. EGH				1	Copper 1
PLUMBING - Constant				625	Steel 625
Var. ILM				128	Steel 128
Var. U				17	Steel 17
HEATING - Constant				375	Steel 375
Var. EGH				190	Steel 190
<b>TOTAL - CONSTANT</b>				<b>1142</b>	<b>Steel 1100, Copper 42</b>





CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Community Building No. 305A-B  
Heating System: Forced warm air  
Construction: Wood frame walls - 1 story - framed wood or concrete floors

WPB Approved List

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Reinforcing steel, tie wire		100	Steel 100
240		Insect screen (1/2 screens)	sf. 667	87	Steel 78, zinc 9
260		Sheet metal, flashings, chimney only		12	Steel 10, zinc 2
280		Glazing points		7	Zinc 7
290		Builders hardware			
		Doors - outside	no. 11		
		Doors - inside	no. 37		
		Windows	no. 51		
		Fire exit bolts	no. 9		
		Door closers	no. 19		
		Coal doors	no. 1		
		Fire doors	no. 2		
		Misc. cab. & wicket hardware	no. 40		
		Total builders hardware		585	Steel 556, brass 29
		Rough hardware*			
		Nails, straps, etc.			
	X-1	Plain		2626	Steel 2626
	X-1	Galvanized		290	Steel 261, zinc 29
	X-2	Plain		2300	Steel 2300
	X-2	Galvanized		256	Steel 231, zinc 25
300		ELECTRICAL			
		Entrance 60A-3P-2B & SN	no. 1	5	Steel 4.5, copper 0.5
		Panelboards:			
		Cir. 12 - 30A - 1P	no. 1	13	Steel 10, cu 3
	EGH	Cir. 1 - 30A - 2P	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14	1f. 3000	39	Copper 39
	EGH	#14	1f. 60	1	Copper 1
		# 6	1f. 100	8	Copper 8
340		Outlet boxes - nonmetallic	no. 75		
350		Switches	no. 14	0.4	Steel 0.2, cu 0.2
		Receptacles	no. 12	0.3	Steel 0.15, cu 0.15
360		Straps, misc.		6	Steel 6
370		Solder		2	Solder 2
380		Mixture	no. 49	12	Steel 9, cu 3
400		PLUMBING			
420		Fixture trim - 12 w.c., 12 lavs. 1 ur., 2 sinks, 1 s.s., 1 D.F.	no. 29	218	CI 185 St1 16 Br 12 Cu 5
430		CI pipe & fittings, size 4"	1f. 65		
		size 3"	1f. 40		
		Size 2"	1f. 75		
		Subtotal pipe & fittings	1f. 180	1500	CI 1500
		(If lead is used for roughing make up of soil pipe, the subtotal of 1500 pounds will change to . . . . .)		1520	CI 1355, lead 165)

\* Under Rough Hardware, 85% of Steel is classed as "A" Product.

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430	(Cont.)	Galv. steel pipe & fittings Size 1-1/2" Size 1-1/4" Subtotal steel pipe & fittings (If lead is used for roughing make-up of waste pipe, the subtotal of 344 lbs. will change to . . . . .)	lf. 75 lf. 41 lf. 116	344	CI 38 <u>Steel 291</u> Zn 15
		Calking and flashing lead	. . . . .	370	CI 50 Stl 264 Zn 14 Lead
		Misc. hangers, etc.		54	Lead 330 Steel 54
440		Galv. water pipe & fittings Pipe size 3/8" Pipe size 1/2" Pipe size 3/4" Subtotal pipe & fittings Pipe size 1" Misc. hangers, etc. Valves and cocks	lf. 45 lf. 205 lf. 150 lf. 400 lf. 85 no. 8	470 161 30 16	CI 42 <u>Stl 408</u> Zn 20 CI 11 <u>steel 143</u> Zn 7 Steel 30 CI 3, Brass 13
450		Water Heaters			
	ACD	35 GPH/100° rise coal heater	no. 1	145	CI 145
	ILM	20 GPH/100° rise auto. stg. gas heater with 45 gallon self contained tank	no. 1	390	CI 25 Stl 353 Br 4 Zn 8
	EGH	50 GPH/100° rise auto. stg. oil heater with 35 gallon self contained tank	no. 1	540	CI 200 Stl 328 Br 4 Zn 8
	ACD	66 gallon storage tank	no. 1	154	Steel 140, Zincl4
	ACD	Flue pipe, 24 gage	sf. 20	20	Steel 20
	E-M	Flue pipe, 24 gage	sf. 15	15	Steel 15
460		Control Equipment			
		Thermometer	no. 1	2	CI 1, Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 Steel 3 Brass 1
480		Black gas pipe & fittings Size 3" Size 3/4" Subtotal pipe & fittings	lf. 15 lf. 10 lf. 25	158	CI 30, <u>Steel 128</u>
	ILM	Misc. hangers, etc.		12	Steel 12
	ILM	Valves and cocks	no. 2	20	Brass 5, CI 15
	U	Black gas pipe & fittings 3/4"	lf. 14	19	CI 2, <u>Steel 17</u>
	U	Valves and cocks	no. 1	3	Brass 3
	U	Misc. hangers, etc.		2	Steel 2
500		HEATING			
530		Heaters - warm air furnaces			
	A	+15° coal Btu 600,000	no. 1	5100	CI 4600, steel 500
	C	0° coal Btu 690,000	no. 1	5900	CI 5340, steel 560
	D	-20° coal Btu 720,000	no. 1	5900	CI 5340, steel 560
	EI	+15° oil & gas Btu 600,000	no. 1	4875	CI 4375, steel 500
	GL	0° oil & gas Btu 690,000	no. 1	5625	CI 5065, steel 560
	HL	-20° oil & gas Btu 720,000	no. 1	5625	CI 5065, steel 560
		Blower 7200 CFM	no. 1	640	CI 40, steel 600
		Motor 2 HP and control	no. 1	125	CI 47 Stl 47 Cu 25 Ru 6
		Propeller type exhaust fan-10" size, complete with auto. shutter	no. 1	22	CI 5, steel 16, cu 1

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont.)		Ducts, metal allowed for relief ducts, 3 l.f. at furnace, fittings, fasteners, hangers, etc.	lf. 300	450	<u>Steel 450</u>
		Registers and grilles	no. 36	144	<u>Steel 144</u>
550		Firing Equipment - Furnaces			
	EGH	+15°, 0° & -20° oil burner GPH 8	no. 1	250	CI 200 Steel 38 Cu 12
	I	+15° gas burner 360,000 Btu input	no. 1	331	CI 291 Steel 33 Cu 7
	L	0° gas burner 990,000 Btu input	no. 1	431	CI 379 Steel 43 Cu 9
	M	-20° gas burner 1030000 Btu input	no. 1	451	CI 397 Steel 45 Cu 9
	EGH	Oil pipe, fittings & valves 2" and 3/4"	lf. 120	270	CI 43 <u>Steel 215</u> Cu 12
	EGH	Reinf. steel for oil tank		30	<u>Steel 30</u>
560		Control Equipment			
		Relay	no. 1	7	Steel 6, Cu 1
	ACD	Damper regulator	no. 1	8	Steel 7, Cu 1
		Thermostats	no. 4	4	Steel 3, Cu 1
570		Breeching-flue conn. 15" dia.	lf. 10	100	Steel 100
600		HOUSEHOLD EQUIPMENT			
		Cooking equipment			
	W	Coal range	no. 1	580	CI 400, Steel 180
	U	Gas range	no. 1	400	CI 220, Steel 170, Cu 10
	V	Oil range with self contained tank	no. 1	470	CI 320 Steel 140 Cu 10
		Flue connection			
	W	For coal range 7" dia.	lf. 5	15	Steel 15
		Refrigerator 35 cu. ft. (select type to be used)			
		Ice	no. 1	70	Steel 63, Zinc 7
		Mechanical	no. 1	700	CI 70 Steel 550 Cu 80
		Dishwashing sink	no. 1	230	CI 15 Steel 205 Zn 10
		Sink	no. 1	109	CI 4 Steel 100 Zn 5

Total Weights of Controlled Materials - "A" Products  
(All underlined weights in the foregoing list)

Structure - Constant	100	Steel 100
Var. X-1	2460	Steel 2460
Var. X-2	2150	Steel 2150
Electrical - Constant	47	Copper 47
Var. EGH	1	Copper 1
Plumbing - Constant	842	Steel 842
Var. ILM	128	Steel 128
Var. U	17	Steel 17
Heating - Constant	450	Steel 450
Var. EGH	245	Steel 245
Total - Constant	1439	Steel 1392, Copper 47

Chapter 1	1
Chapter 2	10
Chapter 3	20
Chapter 4	30
Chapter 5	40
Chapter 6	50
Chapter 7	60
Chapter 8	70
Chapter 9	80
Chapter 10	90
Chapter 11	100
Chapter 12	110
Chapter 13	120
Chapter 14	130
Chapter 15	140
Chapter 16	150
Chapter 17	160
Chapter 18	170
Chapter 19	180
Chapter 20	190
Chapter 21	200
Chapter 22	210
Chapter 23	220
Chapter 24	230
Chapter 25	240
Chapter 26	250
Chapter 27	260
Chapter 28	270
Chapter 29	280
Chapter 30	290
Chapter 31	300
Chapter 32	310
Chapter 33	320
Chapter 34	330
Chapter 35	340
Chapter 36	350
Chapter 37	360
Chapter 38	370
Chapter 39	380
Chapter 40	390
Chapter 41	400
Chapter 42	410
Chapter 43	420
Chapter 44	430
Chapter 45	440
Chapter 46	450
Chapter 47	460
Chapter 48	470
Chapter 49	480
Chapter 50	490
Chapter 51	500
Chapter 52	510
Chapter 53	520
Chapter 54	530
Chapter 55	540
Chapter 56	550
Chapter 57	560
Chapter 58	570
Chapter 59	580
Chapter 60	590
Chapter 61	600
Chapter 62	610
Chapter 63	620
Chapter 64	630
Chapter 65	640
Chapter 66	650
Chapter 67	660
Chapter 68	670
Chapter 69	680
Chapter 70	690
Chapter 71	700
Chapter 72	710
Chapter 73	720
Chapter 74	730
Chapter 75	740
Chapter 76	750
Chapter 77	760
Chapter 78	770
Chapter 79	780
Chapter 80	790
Chapter 81	800
Chapter 82	810
Chapter 83	820
Chapter 84	830
Chapter 85	840
Chapter 86	850
Chapter 87	860
Chapter 88	870
Chapter 89	880
Chapter 90	890
Chapter 91	900
Chapter 92	910
Chapter 93	920
Chapter 94	930
Chapter 95	940
Chapter 96	950
Chapter 97	960
Chapter 98	970
Chapter 99	980
Chapter 100	990

CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDINGS

Series: TPS Project Facilities Building: Toilet, Shower, and Laundry Unit No. 313  
Heating System: Forced warm air  
Construction: Wood frame walls - 1 story - Concrete floor on ground

WPB Approved List

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights
200		STRUCTURE			
210		Rein. steel, tie wire, access.		60	Steel 60
240		Insect screen	sf. 320	42	Steel 36 Zinc 6
260		Sheet metal, flashings chimney only		9	Steel 8 Zinc 1
280		Glazing points		1.2	Zinc 1.2
290		Builders hardware			
		Doors - outside	no. 8		
		Doors - inside	no. 16		
		Windows	no. 24		
		Coal doors	no. 1		
		Door closers	no. 2		
		Misc. cabinet hardware	no. 6		
		Total builders hardware		128	Steel 128
		Rough hardware*			
		Nails, bolts, etc.			
		Plain		460	Steel 460
		Galvanized		40	Steel 34 Zinc 6
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN	no. 1	5	Steel 4.5 Copper 0.5
		Panelboards:			
		Circ. 10 - 1P - 30A	no. 1	11	Steel 9 Copper 2
	EGH	Circ. 2 - 1P - 30A	no. 1	2	Steel 1.5 Copper 0.5
330		Conductors (equiv. lf. single wire)			
		#14 wire	lf. 850	16	Copper 16
	EGH	#14 wire	lf. 60	1	Copper 1
		# 6 wire	lf. 100	8	Copper 8
340		Outlet boxes (nonmetallic)	no. 38		
350		Switches	no. 8	0.3	Steel 0.15 Copper 0.15
		Receptacles	no. 10	0.3	Steel 0.15 Copper 0.15
360		Straps, misc.		3	Steel 3
370		Solder		1	Solder 1
380		Fixtures	no. 20	3.5	Steel 2.5 Copper 1.0
400		PLUMBING			
420		Fixture trim 13 w.c.'s, 16 lavs. 2 urinals, 10 showers, 1 tub, 4 laundry trays, 3 sinks, 2 night wastes	no. 51	443	CI 328 Stl 81 Br 26 Ru 8
430		CI pipe & ftgs., size 5"	lf. 20		
		size 4"	lf. 50		
		size 3"	lf. 120		
		size 2"	lf. 150		
		Subtotal pipe & ftgs.	lf. 340	2930	2930
		(If lead is used for roughing makeup of soil pipe the subtotal of 2930 lbs. will change to . . . . .)		2930	CI 2761 Lead 169)

\* Under Rough Hardware, 85% of steel is classed as "A" Product

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights.
430 (Cont.)		Steel pipe & fittings, Size 1-1/2" Size 1-1/4" Subtotal pipe & ftgs. (If lead is used for rough- ing make-up of waste pipe the subtotal of 262 lbs. will change to . . . . .	lf. 15 lf. 50 lf. 65	262	CI 92 <u>Stl 162</u> Zinc 8
		Caulking & flashing lead Misc. hangers, etc.		328 927 40	CI 92 Stl 79 Zn 4 Lead 1 Lead 927 Steel 40
440		Galv. steel water pipe, ftgs. & hangers Size 2" Size 1-1/2" Size 1-1/4" Size 1" Subtotal pipe, ftgs. & hangers Valves and cocks Galv. steel water pipe, ftgs. & hangers Size 3/4" Size 1/2" Size 3/8" Subtotal pipe, ftgs. & hangers Valves & cocks (cast iron) (If plastic tubing is used for water piping, ftgs. & han- gers sizes 3/4" and under, the subtotal of 553 lbs. will <u>change</u> to . . . . .	lf. 20 lf. 20 lf. 60 lf. 42 lf. 142 no. 6 lf. 95 lf. 245 lf. 90 lf. 430 no. 2	483 35 514 7	CI 100 <u>Stl 365</u> Zn 18 CI 30 Brass 5 CI 90 <u>Stl 404</u> Zn 20 CI 6 Brass 1
450		Water Heaters		43	CI 43)
	ACD	150 GPH/100° rise coal htr.	no. 1	825	CI 825
	ILM	150 GPH/100° rise auto. gas htr. including firing equip.	no. 1	960	CI 900 Stl 55 Br 5
	ECH	150 GPH/100° rise auto. oil htr. including firing equip.	no. 1	973	CI 950 Stl 15 Cu 8
		250 gal. storage tank	no. 1	435	Steel 435
	A-M	Flue pipe	lf. 9	27	Steel 27
460		Control Equipment			
		Thermometer	no. 1	2	CI 1 Brass 1
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 Stl 3 Brass 1
480	ILM	Black gas pipe & fittings Size 1-1/2" Size 3/4" Subtotal pipe & ftgs.	lf. 30 lf. 10 lf. 40	110	CI 13 <u>Stl 97</u> Steel 10
	ILM	Misc. hangers, etc.		10	Steel 10
	ILM	Valves and cocks (cast iron)	no. 2	11	CI 9 Brass 2
500		HEATING			
530		Warm Air Furnaces			
	A	#15° coal Btu 180,000	no. 1	1447	CI 1350 Steel 97
	C	0° coal Btu 210,000	no. 1	1447	CI 1350 Steel 97
	D	-20° coal Btu 250,000	no. 1	1852	CI 1750 Steel 102
	EI	#15° oil or gas Btu 180,000	no. 1	1367	CI 1270 Steel 97
	CL	0° oil or gas Btu 210,000	no. 1	1367	CI 1270 Steel 97
	HI	-20° oil or gas Btu 250,000	no. 1	1752	CI 1650 Steel 102

Crit. List No.	Var.	Critical Material	Dim or Lbs.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont.)		Blower 1100 CFM	no. 1	190	CI 15 Steel 175
		Motor 1/3 HP and controls	no. 1	30	CI 11 Stl 11 Cu 6 Br 2
		Ducts, metal allowed for ftgs., fasteners, hangers, etc. - 3 lf. at furnace & relief duct	lf. 100	200	Steel 200
550		Registers & Grilles	no. 7	26	Steel 26
	EGH	Firing Equipment - Furnace +15°, 0°, & -20° oil burner CPH 3	no. 1	155	CI 124 Stl 23 Cu 5 Br 3
	I	+15° gas burner Btu input 260,000	no. 1	247	CI 217 Stl 25 Cu 3 Br 2
	L	0° gas burner Btu input 300,000	no. 1	256	CI 224 Stl 26 Cu 4 Br 2
	M	-20° gas burner Btu input 360,000	no. 1	270	CI 237 Stl 27 Cu 4 Br 2
	EGH	Oil pipe, fittings & valves 2" and 3/4"	lf. 90	223	CI 38 Stl 175 Brass 10
	EGH	Reinf. steel for oil tank		15	Steel 15
560		Control Equipment			
		Relay	no. 1	7	Steel 6, copper 1
	ACD	Damper regulator	no. 1	8	Steel 7 copper 1
		Thermostats	no. 4	4	Steel 3 copper 1
570		Breeching - flue conn. 10" dia.	lf. 10	75	Steel 75

Total Weights of Controlled Materials - "A" Products  
 (All underlined weights in the foregoing list)

Structure - Constant	480	Steel 480
Electrical - Constant	24	Copper 24
Var. EGH	1	Copper 1
Plumbing - Constant	931	Steel 931
Var. ILM	97	Steel 97
Heating - Constant	200	Steel 200
Var. EGH	190	Steel 190
Total Constant	1635	Steel 1611, Copper 24

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CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDINGS

Series: TPS Project Facilities Building: Toilet, Shower and Laundry Unit No. 314  
Heating System: Forced warm air  
Construction: Wood frame walls - 1 story - Concrete floor on ground

WPB Approved List

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
210		Rein. steel, tie wire, access.		30	Steel 30
240		Insect screen	sf. 207	27	Steel 23 Zinc 4
260		Sheet metal, flashings chimney only		10	Steel 8 Zinc 2
280		Glazing points		1.2	Zinc 1.2
290		Builders hardware			
		Doors - outside	no. 7		
		Doors - inside	no. 11		
		Windows	no. 15		
		Coal doors	no. 1		
		Door closers	no. 2		
		Misc. cabinet hardware	no. 6		
		Total builders hardware		112	Steel 112
		Rough hardware*			
		Nails, bolts, etc.			
		Plain		280	Steel 280
		Galvanized		20	Steel 17 Zinc 3
300		ELECTRICAL			
320		Entrance 60A-3P-2B & SN Panelboards:	no. 1	5	Steel 4.5 Copper 0.5
		Circ. 8 - 1P - 30	no. 1	9	Steel 7.5 Copper 1.5
	EGH	Circ. 2 - 1P - 30	no. 1	2	Steel 1.5 Copper 0.5
330		Conductors (equiv. lf. single wire)			
		#14 wire	lf. 550	7	Copper 7
	EGH	#14 wire	lf. 60	1	Copper 1
		# 8 wire	lf. 100	5	Copper 5
340		Outlet boxes (nonmetallic)	no. 23		
350		Switches	no. 4	0.3	Steel 0.15 Copper 0.15
		Receptacles	no. 6	0.5	Steel 0.3 Copper 0.02
360		Straps, misc.		2	Steel 2
370		Solder		1	Solder 1
380		Fixtures	no. 13	2.35	Steel 1.7 Copper 0.65
400		PLUMBING			
420		Fixture trim - 8 w.c.'s, 8 lavs. 1 urinal, 2 l.trays, 1 sink, 5 shrs. 2 night wastes, 1 B.tub	no. 27	242	CI 184 Stl 42 Br 11 Ru 5
430		CI pipe & ftgs., size 4"	lf. 25		
		size 3"	lf. 70		
		size 2"	lf. 105		
		Subtotal pipe & ftgs.	lf. 200	1560	CI 1560
		(If lead is used for roughing make up of soil pipe, the subtotal of 1560 lbs. will change to . . . . .)		1564	CI 1460 Lead 104 )

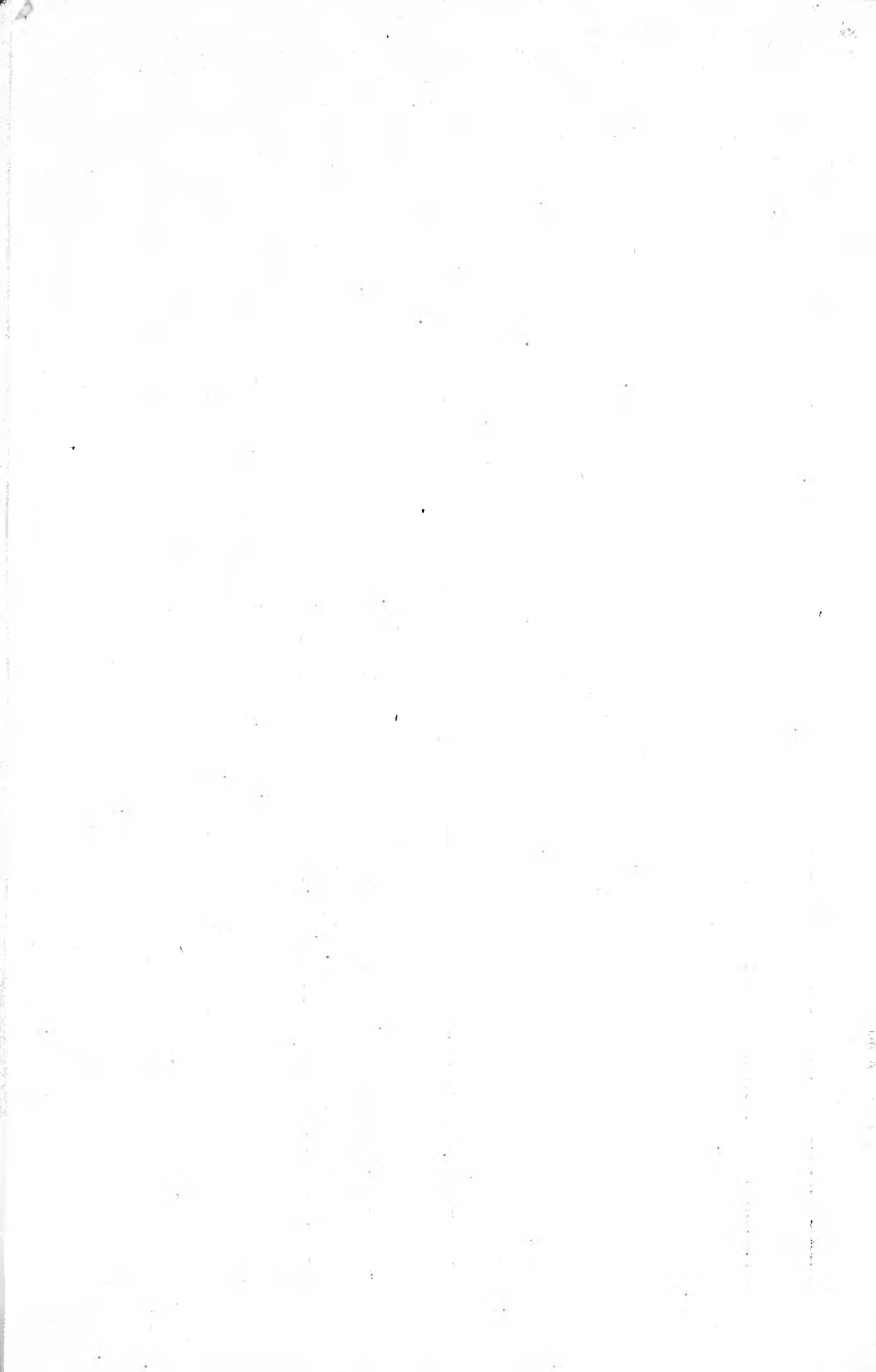
\* Under Rough Hardware, 85% of steel is classed as "A" Product

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
430 (Cont.)		Steel pipe & ftgs., size 1-1/2"	lf. 35		
		Subtotal pipe & ftgs.	lf. 35	151	CI 48 <u>Stl 98</u> Zn 5
		(If lead is used for roughing make up of waste pipe the subtotal of 151 lbs. will change to . . . . .)		166.	CI 48 <u>Stl.28</u> Zn 2 Lead 88
		Caulking & flashing lead		600	Lead 600
		Misc. hangers, etc.		22	Steel 22
440		Galv. water pipe, ftgs. & hangers			
		Size 1-1/2"	lf. 20		
		Size 1-1/4"	lf. 72		
		Size 1"	lf. 46		
		Subtotal pipe, ftgs. & hangers	lf. 138	375	CI 45 <u>Stl 313</u> Zn 15
		Valves and cocks (C.I.)	no. 2	17	CI 15 <u>Brass 2</u>
		Galv. water pipe, ftgs. & hangers			
		Size 3/4"	lf. 200		
		Size 1/2"	lf. 190		
		Size 3/8"	lf. 40		
		Subtotal pipe, ftgs. & hangers	lf. 430	543	CI 65 <u>Stl 456</u> Zn 22
		Valves and cocks (C.I.)	no. 4	11	CI 9, <u>Brass 2</u>
		(If plastic tubing is used for water piping, ftgs. & hangers 3/4" and under, the subtotal of 543 lbs. will change to . . . . .)		22	CI 22
450		Water Heaters			
	ACD	150 GPH/100° rise coal htr.	no. 1	825	CI 825
	ILM	150 GPH/100° rise auto. gas htr. including firing equip.	no. 1	960	CI 900 <u>Stl 55</u> Br 5
	EGH	150 GPH/100° rise auto. oil htr. including firing equip.	no. 1	973	CI 950 <u>Stl 15</u> Cu 8
		150 gal. storage tank	no. 1	300	Steel 300
	A-M	Flue pipe	lf. 9	27	Steel 27
460		Control Equipment			
		Thermometer	no. 1	2	CI 1 <u>Brass 1</u>
		Pressure relief valve	no. 1	1	Brass 1
		Temperature relief valve	no. 1	1	Brass 1
	ACD	Auto. damper regulator	no. 1	11	CI 7 <u>Stl 3</u> Brass 1
480	ILM	Black gas pipe & fittings			
		Size 1-1/2"	lf. 10		
		Size 3/4"	lf. 20		
		Subtotal pipe & fittings	lf. 30	85	CI 13 <u>Steel 72</u>
		Misc. hangers, etc.		8	Steel 8
		Valves & cocks (C.I.)	no. 2	11	CI 9 <u>Brass 2</u>
500		HEATING			
530		Warm air Furnaces			
	A	+15° coal Btu 115,000	no. 1	950	CI 875 <u>Steel 75</u>
	C	0° coal Btu 130,000	no. 1	1344	CI 1250 <u>Steel 94</u>
	D	-20° coal Btu 155,000	no. 1	1344	CI 1250 <u>Steel 94</u>
	EI	+15° oil & gas Btu 115,000	no. 1	890	CI 815 <u>Steel 75</u>
	GL	0° oil & gas Btu 130,000	no. 1	1280	CI 1186 <u>Steel 94</u>
	HM	-20° oil & gas Btu 155,000	no. 1	1280	CI 1186 <u>Steel 94</u>

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
530 (Cont.)		Blower 700 CFM	no. 1	190	CI 15 Steel 175
		Motor 1/3 HP and controls	no. 1	30	CI 11 Stl 11 Cu 6 Ru 2
		Ducts, metal allowed for ftgs., fasteners, hangers, etc. - 3lf. at furnace & relief duct	lf. 80	160	<u>Steel 160</u>
550		Registers & Grilles	no. 5	12	<u>Steel 12</u>
	EGH	Firing Equipment - Furnace ±15°, 0°, & -20° oil burner GPH 2	no. 1	155	CI 124 Stl 23 Cu 5 Br 3
	I	±15° gas burner Btu input 165,000	no. 1	208	CI 183 Stl 21 Cu 3 Br 1
	L	0° gas burner Btu input 190,000	no. 1	238	CI 209 Stl 24 Cu 3 Br 2
	M	-20° gas burner Btu input 222,000	no. 1	238	CI 209 Stl 24 Cu 3 Br 2
	EGH	Oil pipe, fittings & valves 2" and 3/4"	lf. 90	223	CI 38 <u>Stl 175</u> Brass 10
	EGH	Reinf. steel for oil tank		15	<u>Steel 15</u>
560		Control Equipment			
		Relay	no. 1	7	Steel 6 Copper 1
	ACD	Damper regulator	no. 1	8	Steel 7 Copper 1
		Thermostats	no. 4	4	Steel 3 Copper 1
570		Breeching - flue conn. 10" dia.	lf. 10	75	Steel 75

Total Weights of Controlled Materials - 7A" Products  
 (All underlined weights in the foregoing list)

Structure - Constant	282	Steel 282
Electrical - Constant	12	Copper 12
Var. EGH	1	Copper 1
Plumbing - Constant	867	Steel 867
Var. ILM	72	Steel 72
Heating - Constant	160	Steel 160
Var. EGH	190	Steel 190
Total - Constant	1321	Steel 1309, Copper 12

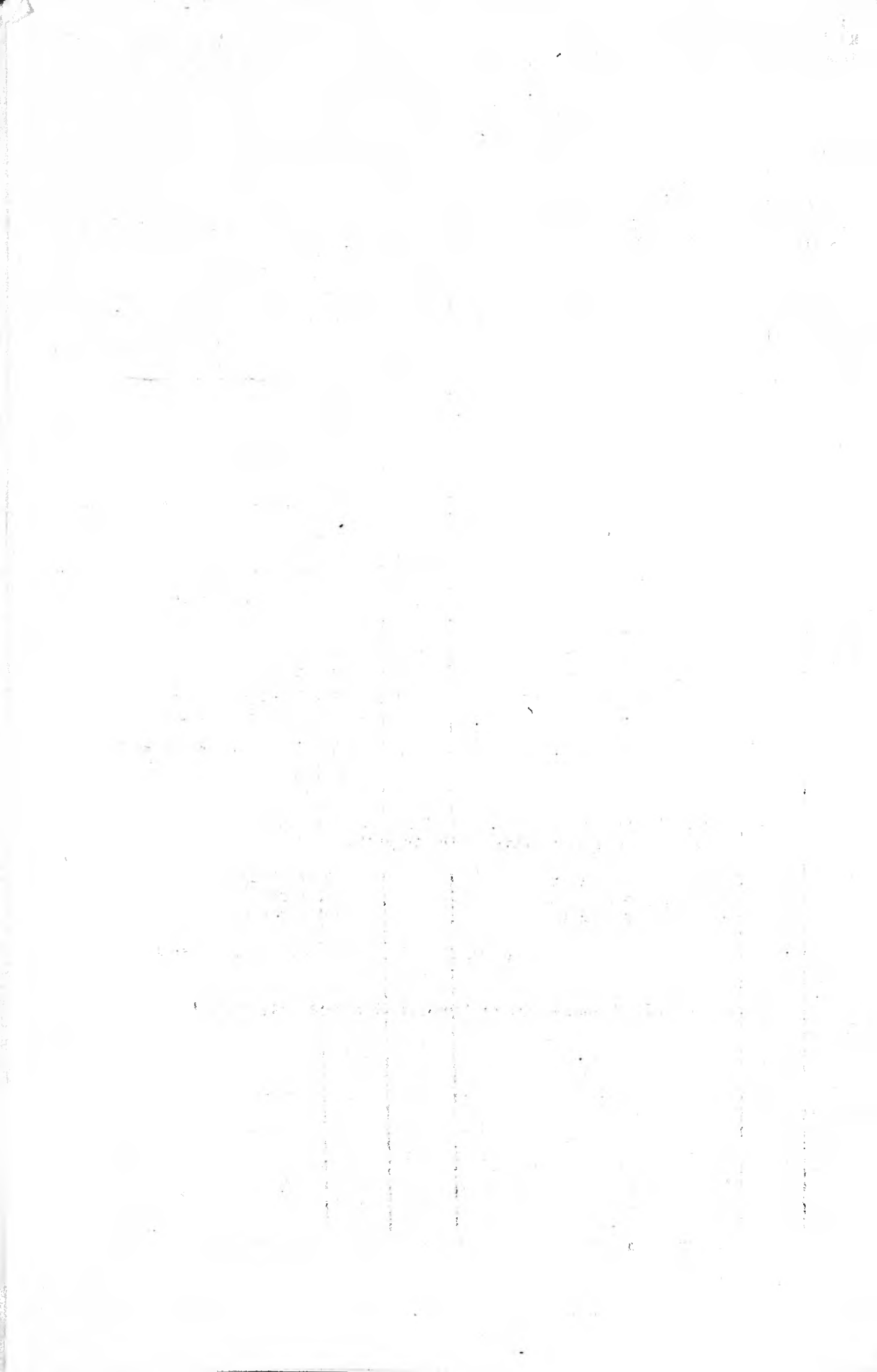


CRITICAL MATERIAL LIST  
FOR  
FPHA. STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Collection Station No. 316  
Heating System: None  
Construction: Wood Frame - Concrete Floor

WPB APPROVED LIST

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE 4" steel wire mesh Rough hardware * Nails, straps, etc. Plain		1 18	<u>Steel 1</u> <u>Steel 18</u>
300		ELECTRICAL			
320		Entrance 30A - 1P - 1 Cir.	no. 1	2	Steel 1.5, Copper 0.5
330		Conductors (equiv. l.f.) (single wire) #14 wire	lf. 30	1	<u>Copper 1</u>
340		Outlet boxes - nonmetallic	no. 1		
380		Fixtures	no. 1	0.5	Steel 0.25, cu 0.25
400		PLUMBING			
430		Cast iron pipe & ftgs. 4"	lf. 10	96	CI 96
		Galking lead and flashing		20	Lead 20
440		Galv. water pipe & ftgs. 3/4"	lf. 15	18	<u>Steel 17</u> , zinc 1
		Misc. hangers, etc.		2	Steel 2
		Valves and cocks (frost proof hydrant)	no. 1	30	CI 20 steel 8, brass 2
TOTAL WEIGHTS OF CONTROLLED MATERIAL - "A" PRODUCTS (All <u>underlined weights</u> in the foregoing list)					
		STRUCTURE - Constant		17	Steel 17
		ELECTRICAL - Constant		1	Copper 1
		PLUMBING - Constant		17	Copper 17
		TOTAL		35	Steel 34, copper 1
	*	Under Rough Hardware, 85% of Steel is classed as "A" Product.			



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Maintenance Building No. 321A  
Heating System: Gravity Space Heater  
Construction: Wood frame walls - 1 story - concrete floor

WPB APPROVED LIST

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
260		Sheet metal, flashings chimney only		8	Steel 7, zinc 1
280		Glazing points		0.3	Zinc 0.3
290		Builders hardware			
		Doors - outside	no. 1		
		Doors - inside	no. 1		
		Windows	no. 2		
		Garage doors	no. 2		
		Total builders hardware		35	Steel 34, brass 1
		Rough hardware *			
		Nails, straps, etc.		110	<u>Steel 110</u>
300		ELECTRICAL			
320		Entrance 30A - 1P - 1 Cir.	no. 1	2	Steel 1.5, copper 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	1f. 150	2	<u>Copper 2</u>
340		Outlet boxes	no. 5		
350		Switches	no. 1	0.02	Steel 0.01, cu 0.01
		Receptacles	no. 1	0.02	Steel 0.01, cu 0.01
360		Straps, misc.		1	Steel 1
380		Fixtures	no. 3	1	Steel 0.5, cu 0.5
400		PLUMBING			
440		Galv. water pipe & ftgs. 3/4"	1f. 20	24	<u>Steel 23</u> , zinc 1
		Misc. hangers, etc.		2	Steel 2
		Valves and cocks	no. 2	4	CI 1, brass 3
480	IIM	Black gas pipe & ftgs. 3/4"	1f. 25	33	CI 3, <u>Steel 30</u>
	IIM	Misc. hangers, etc.		3	Steel 3
	IIM	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
520		Space heaters			
	ACD	+15°, 0° & -20° coal Btu output 25,000	no. 1	150	CI 75, Steel 75
	EGH	+15°, 0° & -20° oil Btu output 25,000	no. 1	123	Steel 121, cu 2
	IIM	+15°, 0° & -20° gas Btu input 40,000	no. 1	142	CI 50 Steel 89 cu 3
550		Firing Equipment			
	EGH	Oil storage tank 55 gallon	no. 1	57	CI 2, Steel 55
		* Under rough hardware, 85% of Steel is classed as "A" Products.			

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
570		Breeching			
	ACD	For coal space heater 7" dia.	lf. 10	30	Steel 30
	EGH	For oil space heater 7" dia.	lf. 10	30	Steel 30
	ILM	For gas space heater 7" dia.	lf. 10	24	Steel 24
Total Weights of Controlled Materials - A Products (All <u>underlined weights</u> in the foregoing list)					
		Structure - Constant		92	Steel 92
		Electrical - Constant		2	Copper 2
		Plumbing - Constant		23	Steel 23
		Plumbing - Var. ILM		30	Steel 30
		Total Constant		117	Steel 115, Copper 2



CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Maintenance Building No. 321B  
Heating System: Gravity Space Heater  
Construction: Wood frame walls - 1 story - concrete floor

WPB APPROVED LIST

Crit. List No.	Var.	Critical Material	Dim. Or. No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
260		Sheet metal, flashings, chimney only		8	Steel 7, zinc 1
280		Glazing points		0.3	Zinc 0.3
290		Builders Hardware			
		Doors - outside	no 1		
		Doors - inside	no. 1		
		Windows	no. 3		
		Garage doors	no. 2		
		Total builders hardware		36	Steel 35, brass 1
		Rough hardware *			
		Nails, straps, etc.		135	<u>Steel 135</u>
300		ELECTRICAL			
320		Entrance 30A - 1P (Circ. 1)	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	1f. 180	2.3	<u>Copper 2.3</u>
340		Outlet boxes - nonmetallic	no. 6		
350		Switches	no. 1	0.02	Steel 0.01, cu 0.01
		Receptacles	no. 1	0.02	Steel 0.01, cu 0.01
360		Straps, misc.		1	Steel 1
380		Fixtures	no. 4	1	Steel 0.5, cu 0.5
400		PLUMBING			
440		Galv. water pipe & ftgs. 3/4"	1f. 20	24	<u>Steel 23, zinc 1</u>
		Misc. hangers, etc.		2	Steel 2
		Valves and cocks	no. 2	4	CI 1, brass 3
480	ILM	Black gas pipe & ftgs. 3/4"	1f. 25	33	<u>CI 3, steel 30</u>
	ILM	Misc. hangers, etc.		3	Steel 3
	ILM	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
520		Space Heaters			
	ACD	+15°, 0° & -20° coal Btu output, 25,000	no. 1	150	CI 75, Steel 75
	EGH	+15°, 0° & -20° oil Btu output, 25,000	no. 1	123	Steel 121, cu 2
	ILM	+15°, 0° & -20° gas Btu input 40,000	no. 1	142	CI 50 Steel 89 cu 3
550		Firing equipment			
	EGH	Oil Storage tank 55 gal.	no. 1	57	CI 2, steel 55
570		Breeching			
	ACD	For coal space heater 7" dia.	1f. 10	30	Steel 30
	EGH	For oil space heater 7" dia.	1f. 10	30	Steel 30
	ILM	For gas space heater 6" dia.	1f. 10	24	Steel 24

\* Under rough hardware, 85% of Steel is classed as "A" Product.

List No. 321B  
 Sheet 2 of 2  
 Oct. 1, 1943

Series: TPS Project Facilities  
 Element: Maintenance Building No. 321B

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
Total Weights of Controlled Materials (A" Products) (All <u>underlined weights</u> in the foregoing list)					
		Structure - Constant		115	Steel 115
		Electrical - Constant		2.3	Copper 2.3
		Plumbing - Constant		23	Steel 23
		Plumbing - Var. IIM		30	Steel 30
		Total Constant		140.3	Steel 138, Copper 2.3

CRITICAL MATERIAL LIST  
FOR  
FPHA STANDARD BUILDING ELEMENTS

Series: TPS Project Facilities Element: Maintenance Building No. 321C  
Heating System: Gravity Space Heater  
Construction: Wood Frame Walls - 1 story - concrete floor

WPB APPROVED LIST

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
260		Sheet metal, flashings, chimneys only		8	Steel 7, zinc 1
280		Glazing points		0.3	Zinc 0.3
290		Builders hardware			
		Doors - outside	no. 1		
		Doors - inside	no. 1		
		Windows	no. 3		
		Garage doors	no. 2		
		Total builders hardware		36	Steel 35, brass 1
		Rough hardware *		160	Steel 160
		Nails, straps, etc.			
300		ELECTRICAL			
320		Entrance 30A - 1P - Cir. 1	no. 1	2	Steel 1.5, cu 0.5
330		Conductor (equiv. 1.f. single wire)			
		#14 wire	1f.210	2.7	Copper 2.7
340		Outlet boxes - nonmetallic	no. 7		
350		Switches	no. 1	0.02	Steel 0.01, cu 0.01
		Receptacles	no. 1	0.02	Steel 0.01, cu 0.01
360		Straps, misc.		1	Steel 1
380		Fixtures	no. 5	1	Steel 0.5, cu 0.5
400		PLUMBING			
440		Galv. water pipe & ftgs. 3/4"	1f. 20	24	Steel 23, zinc 1
		Misc. hangers, etc.		2	Steel 2
		Valves and cocks	no. 2	4	CI 1, brass 3
480	IIM	Black gas pipe & ftgs. 3/4"	1f. 25	33	CI 3, steel 30
	IIM	Misc. hangers, etc.		3	Steel 3
	IIM	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
520		Space Heaters			
	ACD	+15°, 0° & -20° coal Btu output 35,000	no. 1	150	CI 75, steel 75
	EGH	+15°, 0° & -20° oil Btu output 35,000	no. 1	130	Steel 127, cu 3
	IIM	+15°, 0° & -20° gas Btu input 50,000	no. 1	160	CI 55, steel 100, cu 5
550		Firing Equipment			
	EGH	Oil storage tank - 55 gallon	no. 1	57	CI 2, Steel 55
570		Breeching			
	ACD	For coal space heater 7" dia.	1f. 10	30	Steel 30
	EGH	For oil space heater 7" dia.	1f. 10	30	Steel 30
	IIM	For gas space heater 6" dia.	1f. 10	24	Steel 24

\* Under rough hardware, 85% of Steel is classed as "A" Product.

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
Total Weights of Controlled Materials "A" Products (All <u>underlined weights</u> in the foregoing list)					
		Structure - Constant		136	Steel 136
		Electrical - Constant		2.7	Copper 2.7
		Plumbing - Constant		23	Steel 23
		Plumbing - Var. ILM		30	Steel 30
		TOTAL - CONSTANT		161.7	Steel 159, cu 2.7

Critical Material List  
For  
FPHA Standard Building Elements

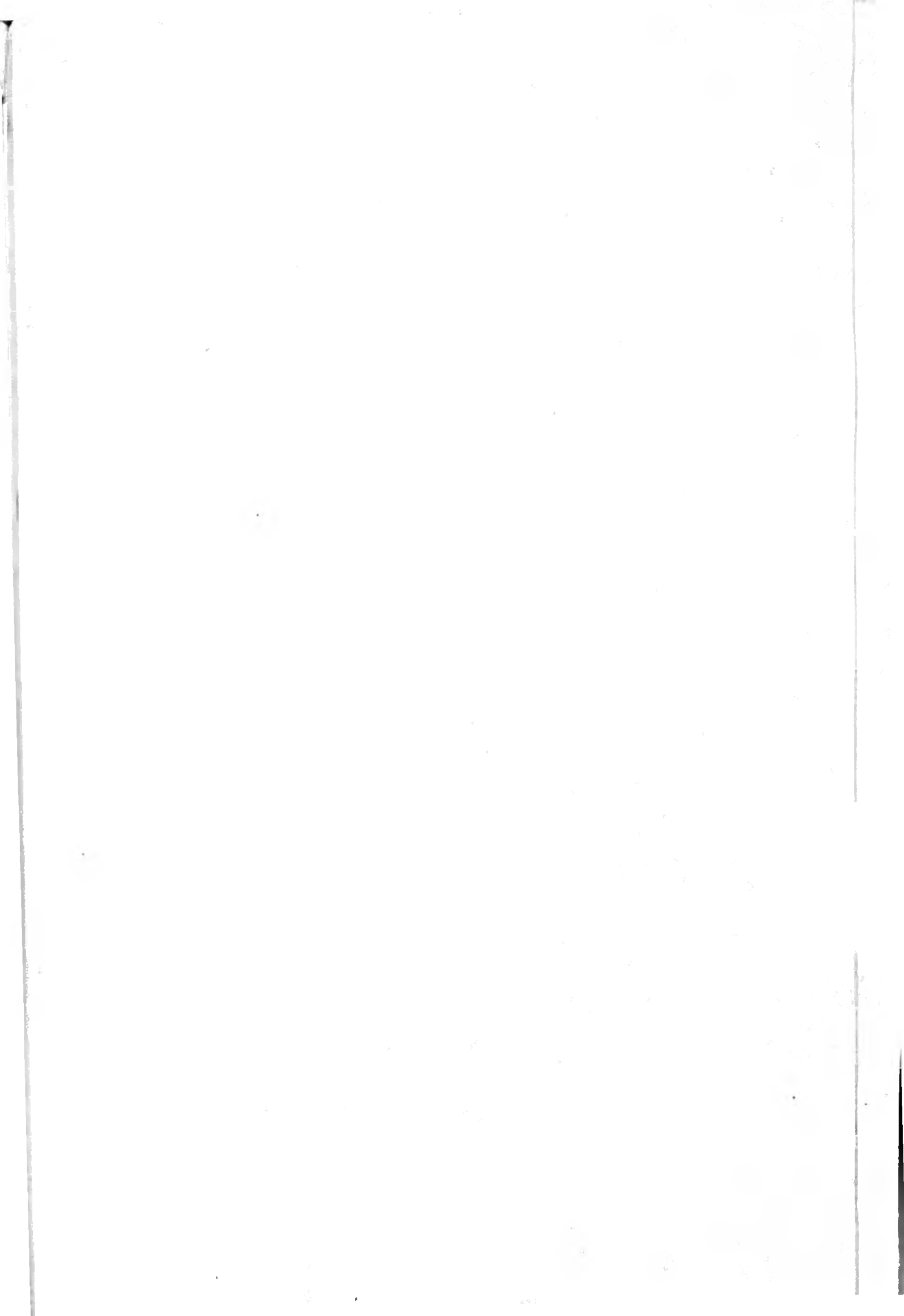
Series: TPS Project Facilities Element: Maintenance Building No. 321D  
Heating System: Gravity Space Heater  
Construction: Wood frame walls - 1 story - concrete floor

WPB APPROVED LIST

Crit. List No.	Var.	Critical Material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
200		STRUCTURE			
260		Sheet metal, flashings chimney only		8	Steel 7, zinc 1
280		Glazing points		0.3	Zinc 0.3
290		Builders hardware			
		Doors - outside	no. 1		
		Doors - inside	no. 2		
		Windows	no. 3		
		Garage doors	no. 2		
		Total builders hardware		39	Steel 37.5, brass 1.5
		Rough hardware *			
		Nails, straps, etc.		180	Steel 180
300		ELECTRICAL			
320		Entrance 30A - 1P - (Cir. 1)	no. 1	2	Steel 1.5, cu 0.5
330		Conductors (equiv. 1.f. single wire)			
		#14 wire	lf. 240	3	Copper 3
340		Outlet boxes - nonmetallic	no. 7		
		Switches	no. 1	0.02	Steel 0.01, cu 0.01
		Receptacles	no. 1	0.02	Steel 0.01, cu 0.01
360		Straps, misc.		1	Steel 1
380		Fixtures	no. 5	1	Steel 0.5, cu 0.5
400		PLUMBING			
440		Galv. water pipe & ftgs. 3/4"	lf. 20	24	Steel 23, zinc 1
		Misc. hangers, etc.		2	Steel 2
		Valves and cocks	no. 2	4	CI 1, brass 3
480	ILM	Black gas pipe & ftgs. 3/4"	lf. 25	33	CI 3, Steel 30
	ILM	Misc. hangers, etc.		3	Steel 3
	ILM	Valves and cocks	no. 1	3	Brass 3
500		HEATING			
520		Space heaters			
	ACD	+15°, 0° & -20° coal Btu output 35,000	no. 1	150	CI 75, steel 75
	EGH	+15°, 0° & -20° oil Btu output 35,000	no. 1	130	Steel 127, cu 3
	ILM	+15°, 0° & -20° gas Btu input	no. 1	160	CI 55, steel 100 cu 5
550		Firing equipment			
	EGH	Oil storage tank - 55 gallon	no. 1	57	CI 2, steel 55
570		Breeching			
	ACD	For coal space heater 7" dia	lf. 10	30	Steel 30
	EGH	For oil space heater 7" dia.	lf. 10	30	Steel 30
	ILM	For gas space heater 6" dia.	lf. 10	24	Steel 24

\* Under rough hardware, 85% of Steel is classes as "A" Product.

Crit. List No.	Var	Critical material	Dim. or No.	Total Wts. Lbs.	Composition of Weights Lbs.
<p><u>Total Weights of Controlled Materials</u> - "A" Products            (All <u>underlined weights</u> in the foregoing list)</p>					
		Structure - Constant		153	Steel 153
		Electrical - Constant		3	Copper 3
		Plumbing - Constant		23	Steel 23
		Plumbing - Var. IIM		30	Steel 30
		Total Constant		179	Steel 176, copper 3



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U.S. Public Housing  
Administration.  
Critical Material Lists  
for FPHA Standard buildings

DATE	ISSUED TO
<i>8-28-50</i>	<i>Benderly</i>
	<i>J</i>

