July 2020



User Guide for Plastic Pipe Load Calculator available on www.charlottepipe.com

Table of Contents

Material Search	1
Material Selection	3
Load Calculation	6
Additional Load Building Notes	7

Copyright, Charlotte Pipe and Foundry Co., July 2020

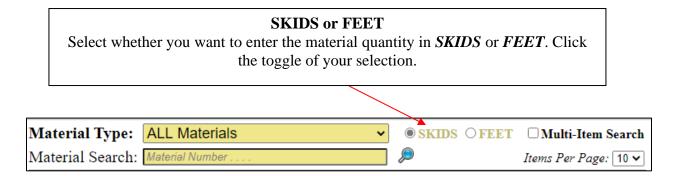
Material Search

	Material Typ lect the display ALL plastic pipe r lay items within a specific materia	na			-	own to
Material Type:	ALL Materials		• SKIDS	OFEET	🗆 Multi-	Item Search
Material Search:		8			Items Per	Page: 10 🗸
Material Number	ALL Materials PVC SCH 40 PLAIN END PVC SCH 40 BELLED	s k	Feet Per Truck	T/L Factor Per Skid	SKIDS	SELECT
PVC 04005 0600	PVC FOAM CORE		252,000'	0.5		+
PVC 04005 0800	PR-200 & PR-160 WELL CASING		252,000'	1		+
PVC 04007 0600	APA		196,000'	0.5		+
PVC 04007 0800	ABS FOAM CORE PVC SCH 80		196,000'	1		+
PVC 04010 0600	PVC 2729 SEWER & DRAIN PIPE		132,000'	0.5		+
PVC 04010 0800	SEWER SDR-35 CTS FLOWGUARD GOLD		132,000'	1		+
PVC 04025 0600	CHEMDRAIN SCH 30 THIN WALL		38,080'	1		+
PVC 07100 0600	1 1/4" 10' 212 2,120' 48		101,760'	0.583		+

Material Search

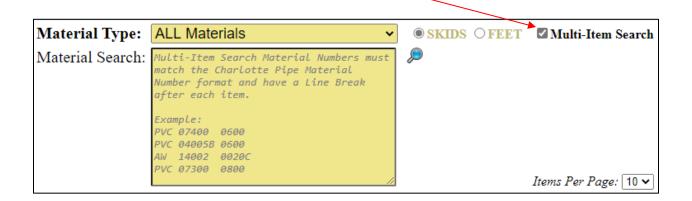
Enter a specific material to display *ONLY* that item. Enter the Charlotte Pipe part number, and click the magnifying glass to search.

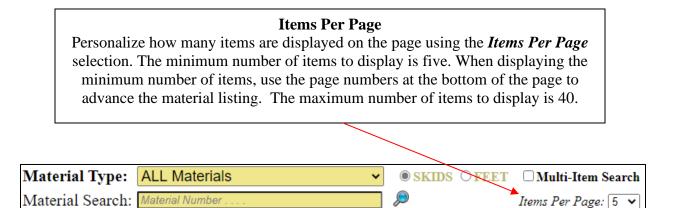
(Material Type: ALL Materials Material Search: PVC 07112 0800								Item Search Page: 10 🗸
Material Number	Size		Pieces Per Skid		Skids Per	Feet Per Truck			SELECT
PVC 07112 0800	1 1/2"	20'	165	3,300'	24	79,200'	1		+
								Select All	



Multi-Item Search

To search for a list of specific materials, check the *Multi-Item Search* feature. Enter the Charlotte Pipe part number for the materials in the **Material Search** box, making sure each item is on a separate line. When you have entered all of the part numbers, click the magnifying glass to search for the items.





Material Selection

After entering all of the material selection criteria, click on the *magnifying glass* to search.

Material Type:	ALL Materials ~	● SKIDS ○ FEET	Multi-Item Search
	PVC 100108 0600 PVC 07600 0600 PVC 04400 0600 PVC 07400 0600 PVC 04300 0600	<mark>.</mark>	

All of the materials meeting the search criteria entered above will show beneath the search criteria:

								Items Per	Page: 10 🗸
Material Number	Size	Length	Pieces Per Skid	Feet Per Skid	Skids Per Truck	Feet Per Truck	T/L Factor Per Skid	SKIDS	SELECT
PVC 07400 0600	4"	10'	67	670'	24	16,080'	1		+
PVC 07600 0600	6"	10'	33	330'	24	7,920'	1.166		+
PVC 04300 0600	3"	10'	113	1,130'	24	27,120'	1		+
PVC 04400 0600	4"	10'	67	670'	24	16,080'	1		+
PVC 10010B 0600	1"	20'	177	3,540'	28	99,120'	0.7		+
	1					<u>.</u>		Select All	•

Enter the number of skids (or footage) of the material, and click the + to *select* the material.

Material Number	Size	Length	Pieces Per Skid	Feet Per Skid	Skids Per Truck	Feet Per Truck	T/L Factor Per Skid	SKIDS	SELECT
PVC 07400 0600	4"	10'	67	670'	24	16,080'	1	5	+
PVC 07600 0600	6"	10'	33	330'	24	7,920'	1.166	12	+
PVC 04300 0600	3"	10'	113	1,130'	24	27,120'	1	7	+
PVC 04400 0600	4"	10'	67	670'	24	16,080'	1	4	+
PVC 10010B 0600	1"	20'	177	3,540'	28	99,120'	0.7	3	+
								Select All	

You may enter the amount for a material and *select* it individually, or enter the amounts for all of the materials and add them all at once, using the *Select All* button.

The bottom portion of the page will give a summary of all of the *selected* materials and the quantities entered:

Selected Materia	ıls											SKIDS	FEET
Material Number	Size	Length	Pieces Per Skid	Feet Per Skid	Skids Per Truck	Feet Per Truck	T/L Factor Per Skid	SKIDS	FEET	WEIGHT	UPDATE	REMOVE	T/L Factor
PVC 07400 0600	4"	10'	67	670'	24	16,080'	1	5	3,350	6,884	+	-	5
PVC 07600 0600	6"	10'	33	330'	24	7,920'	1.166	12	3,960	14,304	+	-	13.992
PVC 04300 0600	3"	10'	113	1,130'	24	27,120'	1	7	7,910	7,095	+	-	7
PVC 04400 0600	4"	10'	67	670'	24	16,080'	1	4	2,680	3,318	+	-	4
PVC 10010B 0600	1"	20'	177	3,540'	28	99,120'	0.7	3	10,620	4,301	+	-	2.1
	1	.1	1			1	.1	Update All	1			Remove All	

Column	Data Summary
Skids / Feet	Selection Option to show quantities in Skids or Feet
Material Number	Charlotte Pipe Material ID
Size	Size of the pipe
Length	Length of the pipe
Pieces Per Skid	Number of pieces in a skid of the material
Feet Per Skid	Footage in a skid of the material
Skids Per Truck	Number of skids to a truck
Feet Per Truck	Footage for a full truckload
T/L Factor Per Skid	Amount of truck space we estimate a skid of the material will consume
Skids	Selected number of skids entered
Feet	Total footage of the number of skids selected
Weight	Total weight of the number of skids selected
Update	Option to update any changes made to the material quantity selected
Remove	Option to remove the material from your selection
T/L Factor	Amount of truck space we estimate your selection will consume
Update All	Selection Option to <u>update</u> all material quantity changes at once
Remove All	Selection Option to <u>remove</u> all of the selected items at once

You may change the data presentation of the Selected Materials from SKIDS to FEET (or vice versa) by changing the toggle.

Material Number	Size	Length	Pieces Per Skid	Feet Per Skid	Skids Per Truck	Feet Per Truck	T/L Factor Per Skid	SKIDS	FEET	WEIGHT	UPDATE	REMOVE	T/L Factor
PVC 07400 0600	4"	10'	67	670'	24	16,080'	1	5	3350	<mark>6</mark> ,884	+		5
PVC 07600 0600	6"	10'	33	330'	24	7,920'	1.166	12	3960	14,304	+	-	13.992
PVC 04300 0600	3"	10'	113	1,130'	24	27,120'	1	7	7910	7,095	+	-	7
	.1						::	/	Update All)	1	Remove All	
The highlig	ghted f	fields i	n the S	electe	d Mat	erials s	section	are av	ailable	to edit.			

Update the T/L Factor with any item changes by clicking + on the item.

Remove a single material from the T/L Factor calculation by clicking the — to remove it.

Selected Materia	ıls											OSKIDS @	FEET
Material Number	Size	Length	Pieces Per Skid	Feet Per Skid	Skids Per Truck	Feet Per Truck	T/L Factor Per Skid	SKIDS	FEET	WEIGHT	UPDATE	REMOVE	T/L Factor
PVC 07400 0600	4"	10'	67	<mark>670</mark> '	24	16,080'	1	6.49	4350	<mark>8,93</mark> 9	+	-	6.49
PVC 07600 0600	6"	10'	33	330'	24	7,920'	1.166	2	660	2,384	+	-	2.332
PVC 04300 0600	3"	10'	113	1,130'	24	27,120'	1	1	1130	1,014	+	-	1
			.1	11			.1		Update All			Remove All	

Edit more than one item at a time and use the Update All button to re-calculate the T/L Factor with all of the changes entered.

Material Number Size Length Per Skid Pieces Skid Skid Skid T/L Factor Per Skid Skid Skid Skid Skid Skid Skid SkiD Per Skid SKIDS	FEET	WEIGHT	UPDATE	REMOVE	T/L Factor
PVC 10010B 0600 1" 20' 177 3,540' 28 99,120' 0.7 1	3540	1,434	+	-	0.7
	Update All)		Remove All	

Remove all of the items shown in the Selected Materials section by clicking Remove All.

Load Calculation

Directly under the Material Selection section of the page, is the *Load Calculator*. This feature provides a summary of the materials selected as well as an estimation of how much space the selected materials will consume on a standard 48' flatbed.

10' Skids	20' Skids	TOTAL Skids	TOTAL Weight(lbs)	MAX T/L Factor	TOTAL T/L Factor
28	3	<u>31</u>	35,902	28	32.092

Column	Data Summary
10' Skids	Total number of 10' Skids based on the material selected
20' Skids	Total number of 20' Skids based on the material selected
TOTAL Skids	Total number of Skids for the material selected
TOTAL Weight (lbs)	Total weight of the material selected
MAX T/L Factor*	<u>Guideline</u> for how much space material can consume on the truck; see the additional loading notes below
TOTAL T/L Factor	Total calculation of how much space your selected material will consume on the truck

Important note: Truckload Factors are estimates only. Height restrictions may apply. Regardless of Truckload Factor, you <u>cannot</u> exceed the maximum weight of 45,000 lbs per truckload.

T/L Factor shown in **GREEN TEXT** = T/L Factor for the selected material is within acceptable range for a "good" load.

TOTAL T/L Factor
27.992

T/L Factor shown in **RED TEXT** = T/L Factor for the selected material is acceptable, but nearing maximum. Be mindful of the material combinations and weight of the load.

TOTAL T/L Factor	
30.992	

T/L Factor shown in **RED TEXT WITH STRIKETHROUGH** = T/L Factor for the selected material is **too high** and it will not fit on the truck. You should remove some of the material.

TOTAL T/L Factor	
35.992	

Additional Load Building Notes

PVC Pipe Shipping Guidelines

- 28 is the maximum Truckload Factor of 20ft pipe.
- **35** is the maximum **Truckload Factor** for a combination of **10ft** and **20ft** pipe.
- 28 is the maximum Truckload Factor of 10ft sizes 1¹/₂" and 2" (Foam/PVC).
- **24** is the maximum **Truckload Factor** of 10ft sizes 3", 4", and 6" (Foam/PVC); review the Loading Chart to utilize additional space on truck.
- **24** is the maximum **Truckload Factor** of 20ft sizes 4", 6", 8" and 10" (Foam/PVC); review the Loading Chart to utilize additional space on truck.
- 24 is the minimum **Truckload Factor** for a full truckload.

ABS Pipe Shipping Guidelines

- **5 skids high** is the max height on ABS.
- **28** is the maximum **Truckload Factor** of **10ft** ABS pipe.
- 28 is the maximum Truckload Factor of 20ft ABS pipe.
- **35** is the maximum **Truckload Factor** for a combination of **10ft** and **20ft** pipe.