#### **Character sets**

# Using special characters from Windows Glyph List 4 (WGL4) in HTML

ANSI	MACROMAN	DIFFERENCES	WGL4	SYMBOL	WINGDINGS	WINGDINGS 2
------	----------	-------------	------	--------	-----------	-------------

Microsoft has defined a Pan-European character set known as <u>Windows Glyph List 4</u> (WGL4). It contains characters that are required for Western, Central and Eastern European languages, and includes Cyrillic and Greek alphabets and many characters for which Monotype's <u>Symbol font</u> was previously required. The WGL4 standard incorporates codepages 1250 (Eastern Europe), 1251 (Cyrillic), <u>1252 (US English = ANSI)</u>, 1253 (Greek) and 1254 (Turkish). WGL4 contains 652 characters (compared with 256 in the old codepages), and uses <u>Unicode</u> numbering for the characters.

The new characters can easily be used in Web pages, either by adding &# to the front of the decimal number and; to the end (e.g. ‰ for a per mille sign (‰)), or by using the new HTML 4 character entity references (although not all WGL4 characters have corresponding entities). However, support for the new characters varies between browsers. The tables below use the decimal numeric character references to display the characters in the first column, and can be used to determine which characters are supported by your browser and fonts.

The new characters can be used in Word 97, Word 2000, Word 2002, Word 2003 and Word 2007 by selecting Symbol on the Insert menu and choosing a character from the dialog box.

There are many <u>Unicode fonts</u> that include the WGL4 characters.

### **Unicode Ranges**

- Basic Latin
- Latin-1 Supplement
- Latin Extended-A
- Latin Extended-B
- Spacing Modifier Letters
- Greek
- Cyrillic
- Latin Extended Additional
- General Punctuation
- Superscripts and Subscripts
- Currency Symbols

- <u>Letterlike Symbols</u>
- Number Forms
- Arrows
- <u>Mathematical Operators</u>
- Miscellaneous Technical
- Box Drawing
- Block Elements
- Geometric Shapes
- Miscellaneous Symbols
- Private Use Area
- Alphabetic Presentation Forms

[TOP]

**Basic Latin**: Unicode U+0000 – U+007F (0-127)

Character	Decimal	Hex	Entity	Description
1 1	32	20	-	space
!	33	21	-	exclamation mark
11	34	22	"	quotation mark
#	35	23	-	number sign
\$	36	24	-	dollar sign
%	37	25	-	percent sign
&	38	26	&	ampersand
1	39	27	-	apostrophe
(	40	28	-	left parenthesis
)	41	29	-	right parenthesis
*	42	2A	-	asterisk
+	43	2B	-	plus sign
,	44	2C	-	comma
_	45	2D	-	hyphen-minus
•	46	2E	-	full stop
/	47	2F	-	solidus
0	48	30	-	digit zero
1	49	31	-	digit one
2	50	32	-	digit two
3	51	33	-	digit three
4	52	34	-	digit four
5	53	35	-	digit five
6	54	36	-	digit six
	55	37	-	digit seven

7				
8	56	38	-	digit eight
9	57	39	-	digit nine
•	58	3A	-	colon
• •	59	3B	-	semicolon
<	60	3C	<	less-than sign
=	61	3D	-	equals sign
>	62	3E	>	greater-than sign
?	63	3F	-	question mark
@	64	40	-	commercial at
A	65	41	-	Latin capital letter A
В	66	42	-	Latin capital letter B
C	67	43	-	Latin capital letter C
D	68	44	-	Latin capital letter D
E	69	45	-	Latin capital letter E
F	70	46	-	Latin capital letter F
G	71	47	-	Latin capital letter G
Н	72	48	-	Latin capital letter H
I	73	49	-	Latin capital letter I
J	74	4A	-	Latin capital letter J
K	75	4B	-	Latin capital letter K
L	76	4C	-	Latin capital letter L
M	77	4D	-	Latin capital letter M
N	78	4E	-	Latin capital letter N

О	79	4F	-	Latin capital letter O
P	80	50	-	Latin capital letter P
Q	81	51	-	Latin capital letter Q
R	82	52	-	Latin capital letter R
S	83	53	-	Latin capital letter S
T	84	54	-	Latin capital letter T
U	85	55	-	Latin capital letter U
V	86	56	-	Latin capital letter V
W	87	57	-	Latin capital letter W
X	88	58	-	Latin capital letter X
Y	89	59	-	Latin capital letter Y
Z	90	5A	-	Latin capital letter Z
[	91	5B	-	left square bracket
\	92	5C	-	reverse solidus
]	93	5D	-	right square bracket
٨	94	5E	-	circumflex accent
_	95	5F	-	low line
`	96	60	-	grave accent
a	97	61	-	Latin small letter a
b	98	62	-	Latin small letter b
С	99	63	_	Latin small letter c
d	100	64	-	Latin small letter d
e	101	65	-	Latin small letter e
f	102	66	-	Latin small letter f

g	103	67	-	Latin small letter g
h	104	68	-	Latin small letter h
i	105	69	-	Latin small letter i
j	106	6A	-	Latin small letter j
k	107	6B	-	Latin small letter k
1	108	6C	-	Latin small letter l
m	109	6D	-	Latin small letter m
n	110	6E	-	Latin small letter n
О	111	6F	-	Latin small letter o
p	112	70	-	Latin small letter p
q	113	71	-	Latin small letter q
r	114	72	-	Latin small letter r
S	115	73	-	Latin small letter s
t	116	74	-	Latin small letter t
u	117	75	-	Latin small letter u
V	118	76	-	Latin small letter v
W	119	77	-	Latin small letter w
X	120	78	-	Latin small letter x
У	121	79	-	Latin small letter y
Z	122	7A	-	Latin small letter z
{	123	7B	-	left curly bracket
I	124	7C	-	vertical line
}	125	7D	-	right curly bracket
~	126	7E	-	tilde

# <u>Latin-1 Supplement</u>: Unicode U+0080 – U+00FF (128–255)

Character	Decimal	Hex	Entity	Description
	160	A0		no-break space
i	161	A1	¡	inverted exclamation mark
¢	162	A2	¢	cent sign
$\overline{\mathfrak{L}}$	163	A3	£	pound sign [lira sign is £ (₤)]
¤	164	A4	¤	currency sign
¥	165	A5	¥	yen sign
I I	166	A6	¦	broken bar
§	167	A7	§	section sign
••	168	A8	¨	diaeresis
©	169	A9	&сору;	copyright sign
a	170	AA	ª	feminine ordinal indicator
<b>«</b>	171	AB	«	left-pointing double angle quotation mark
$\neg$	172	AC	¬	not sign
	173	AD	­	soft hyphen
R	174	AE	®	registered sign
_	175	AF	¯	macron
0	176	В0	°	degree sign
±	177	B1	±	plus-minus sign
2	178	B2	²	superscript two
3	179	В3	³	superscript three
,	180	B4	´	acute accent
μ	181	B5	µ	micro sign

$  \mathfrak{I}  $	182	B6	¶	pilcrow sign
	183	B7	·	middle dot
5	184	B8	¸	cedilla
1	185	В9	¹	superscript one
О	186	BA	º	masculine ordinal indicator
<b>&gt;&gt;</b>	187	ВВ	»	right-pointing double angle quotation mark
1/4	188	BC	¼	vulgar fraction one quarter
1/2	189	BD	½	vulgar fraction one half
3/4	190	BE	¾	vulgar fraction three quarters
ذ	191	BF	¿	inverted question mark
À	192	C0	À	Latin capital letter A with grave
Á	193	C1	Á	Latin capital letter A with acute
Â	194	C2	Â	Latin capital letter A with circumflex
Ã	195	C3	Ã	Latin capital letter A with tilde
Ä	196	C4	Ä	Latin capital letter A with diaeresis
Å	197	C5	Å	Latin capital letter A with ring above
Æ	198	C6	Æ	Latin capital letter AE
Ç	199	C7	Ç	Latin capital letter C with cedilla
Ç È	200	C8	È	Latin capital letter E with grave
É	201	C9	É	Latin capital letter E with acute
Ê	202	CA	Ê	Latin capital letter E with circumflex
Ë	203	СВ	Ë	Latin capital letter E with diaeresis
Ì	204	CC	Ì	Latin capital letter I with grave
Í	205	CD	Í	Latin capital letter I with acute

Î	206	CE	Î	Latin capital letter I with circumflex
Ϊ	207	CF	Ï	Latin capital letter I with diaeresis
Đ	208	D0	Ð	Latin capital letter Eth
Ñ	209	D1	Ñ	Latin capital letter N with tilde
Ò	210	D2	Ò	Latin capital letter O with grave
Ó	211	D3	Ó	Latin capital letter O with acute
Ô	212	D4	Ô	Latin capital letter O with circumflex
Õ	213	D5	Õ	Latin capital letter O with tilde
Ö	214	D6	Ö	Latin capital letter O with diaeresis
×	215	D7	×	multiplication sign
Ø	216	D8	Ø	Latin capital letter O with stroke
Ù	217	D9	Ù	Latin capital letter U with grave
Ú	218	DA	Ú	Latin capital letter U with acute
Û	219	DB	Û	Latin capital letter U with circumflex
Ü	220	DC	Ü	Latin capital letter U with diaeresis
Ý	221	DD	Ý	Latin capital letter Y with acute
Þ	222	DE	Þ	Latin capital letter Thorn
ß	223	DF	ß	Latin small letter sharp s
à	224	E0	à	Latin small letter a with grave
á	225	E1	á	Latin small letter a with acute
â	226	E2	â	Latin small letter a with circumflex
ã	227	E3	ã	Latin small letter a with tilde
ä	228	E4	ä	Latin small letter a with diaeresis
å	229	E5	å	Latin small letter a with ring above

æ	230	E6	æ	Latin small letter ae
ç	231	E7	ç	Latin small letter c with cedilla
è	232	E8	è	Latin small letter e with grave
é	233	E9	é	Latin small letter e with acute
ê	234	EA	ê	Latin small letter e with circumflex
ë	235	EB	ë	Latin small letter e with diaeresis
ì	236	EC	ì	Latin small letter i with grave
í	237	ED	í	Latin small letter i with acute
î	238	EE	î	Latin small letter i with circumflex
ï	239	EF	ï	Latin small letter i with diaeresis
ð	240	F0	ð	Latin small letter eth
ñ	241	F1	ñ	Latin small letter n with tilde
ò	242	F2	ò	Latin small letter o with grave
ó	243	F3	ó	Latin small letter o with acute
ô	244	F4	ô	Latin small letter o with circumflex
õ	245	F5	õ	Latin small letter o with tilde
ö	246	F6	ö	Latin small letter o with diaeresis
÷	247	F7	÷	division sign
ø	248	F8	ø	Latin small letter o with stroke
ù	249	F9	ù	Latin small letter u with grave
ú	250	FA	ú	Latin small letter u with acute
û	251	FB	û	Latin small letter u with circumflex
ü	252	FC	ü	Latin small letter u with diaeresis
ý	253	FD	ý	Latin small letter y with acute

þ	254	FE	þ	Latin small letter thorn
ÿ	255	FF	ÿ	Latin small letter y with diaeresis

# <u>Latin Extended-A</u>: Unicode U+0100 – U+017F (256–383)

Character	Decimal	Hex	Entity	Description
Ā	256	0100	-	Latin capital letter A with macron
ā	257	0101	-	Latin small letter a with macron
Ă	258	0102	-	Latin capital letter A with breve
ă	259	0103	-	Latin small letter a with breve
Ą	260	0104	-	Latin capital letter A with ogonek
ą	261	0105	-	Latin small letter a with ogonek
ą Ć	262	0106	-	Latin capital letter C with acute
ć	263	0107	-	Latin small letter c with acute
Ĉ	264	0108	-	Latin capital letter C with circumflex
ĉ	265	0109	-	Latin small letter c with circumflex
Ċ	266	010A	-	Latin capital letter C with dot above
ċ	267	010B	-	Latin small letter c with dot above
Č	268	010C	-	Latin capital letter C with caron
č	269	010D	-	Latin small letter c with caron
Ď	270	010E	-	Latin capital letter D with caron
ď	271	010F	-	Latin small letter d with caron
Ð	272	0110	-	Latin capital letter D with stroke
đ	273	0111	-	Latin small letter d with stroke
Ē	274	0112	-	Latin capital letter E with macron

ē	275	0113	-	Latin small letter e with macron
Ĕ	276	0114	-	Latin capital letter E with breve
ĕ	277	0115	-	Latin small letter e with breve
Ė	278	0116	-	Latin capital letter E with dot above
ė	279	0117	-	Latin small letter e with dot above
Ę	280	0118	-	Latin capital letter E with ogenek
ę	281	0119	-	Latin small letter e with ogenek
ę Ě	282	011A	-	Latin capital letter E with caron
ě	283	011B	-	Latin small letter e with caron
Ĝ	284	011C	-	Latin capital letter G with circumflex
ĝ Ğ	285	011D	-	Latin small letter g with circumflex
Ğ	286	011E	-	Latin capital letter G with breve
ğ	287	011F	-	Latin small letter g with breve
Ġ	288	0120	-	Latin capital letter G with dot above
ġ	289	0121	-	Latin small letter g with dot above
Ģ	290	0122	-	Latin capital letter G with cedilla
ģ	291	0123	-	Latin small letter g with cedilla
ģ Ĥ	292	0124	-	Latin capital letter H with circumflex
ĥ	293	0125	-	Latin small letter h with circumflex
Ħ	294	0126	-	Latin capital letter H with stroke
ħ	295	0127	-	Latin small letter h with stroke
Ĩ	296	0128	-	Latin capital letter I with tilde
ĩ	297	0129	-	Latin small letter i with tilde
Ī	298	012A	-	Latin capital letter I with macron

ī	299	012B	-	Latin small letter i with macron
Ĭ	300	012C	-	Latin capital letter I with breve
ĭ	301	012D	-	Latin small letter i with breve
Į	302	012E	-	Latin capital letter I with ogonek
į	303	012F	-	Latin small letter i with ogonek
İ	304	0130	-	Latin capital letter I with dot above
1	305	0131	-	Latin small letter dotless i
IJ	306	0132	-	Latin capital ligature IJ
ij	307	0133	-	Latin small ligature ij
Ĵ	308	0134	-	Latin capital letter J with circumflex
ĵ	309	0135	-	Latin small letter j with circumflex
Ķ	310	0136	-	Latin capital letter K with cedilla
ķ	311	0137	-	Latin small letter k with cedilla
K	312	0138	-	Latin small letter kra
Ĺ	313	0139	-	Latin capital letter L with acute
ĺ	314	013A	-	Latin small letter I with acute
Ļ	315	013B	-	Latin capital letter L with cedilla
ļ	316	013C	-	Latin small letter I with cedilla
Ľ	317	013D	-	Latin capital letter L with caron
1'	318	013E	-	Latin small letter I with caron
Ŀ	319	013F	-	Latin capital letter L with middle dot
<u>l</u> ·	320	0140	-	Latin small letter I with middle dot
Ł	321	0141	-	Latin capital letter L with stroke
ł	322	0142	-	Latin small letter I with stroke

Ń	323	0143	-	Latin capital letter N with acute
ń	324	0144	-	Latin small letter n with acute
Ņ	325	0145	-	Latin capital letter N with cedilla
	326	0146	-	Latin small letter n with cedilla
ņ Ň	327	0147	-	Latin capital letter N with caron
ň	328	0148	-	Latin small letter n with caron
'n	329	0149	-	Latin small letter n preceded by apostrophe
Ŋ	330	014A	-	Latin capital letter Eng
ŋ	331	014B	-	Latin small letter eng
Ō	332	014C	-	Latin capital letter O with macron
ō	333	014D	-	Latin small letter o with macron
Ŏ	334	014E	-	Latin capital letter O with breve
ŏ	335	014F	-	Latin small letter o with breve
Ő	336	0150	-	Latin capital letter O with double acute
ő	337	0151	-	Latin small letter o with double acute
Œ	338	0152	Œ	Latin capital ligature OE
œ	339	0153	œ	Latin small ligature oe
Ŕ	340	0154	-	Latin capital letter R with acute
ŕ	341	0155	-	Latin small letter r with acute
Ŗ	342	0156	-	Latin capital letter R with cedilla
	343	0157	-	Latin small letter r with cedilla
ŗ Ř	344	0158	-	Latin capital letter R with caron
ř	345	0159	-	Latin small letter r with caron
Ś	346	015A	-	Latin capital letter S with acute

Ś	347	015B	-	Latin small letter s with acute
Ŝ	348	015C	-	Latin capital letter S with circumflex
ŝ	349	015D	-	Latin small letter s with circumflex
Ş	350	015E	-	Latin capital letter S with cedilla
Ş	351	015F	-	Latin small letter s with cedilla
Ş Š	352	0160	Š	Latin capital letter S with caron
š	353	0161	š	Latin small letter s with caron
Ţ	354	0162	-	Latin capital letter T with cedilla
ţ	355	0163	-	Latin small letter t with cedilla
Ť	356	0164	-	Latin capital letter T with caron
ť	357	0165	-	Latin small letter t with caron
Ŧ	358	0166	-	Latin capital letter T with stroke
ŧ	359	0167	-	Latin small letter t with stroke
Ũ	360	0168	-	Latin capital letter U with tilde
ũ	361	0169	-	Latin small letter u with tilde
Ū	362	016A	-	Latin capital letter U with macron
ū	363	016B	-	Latin small letter u with macron
Ŭ	364	016C	-	Latin capital letter U with breve
ŭ	365	016D	-	Latin small letter u with breve
Ů	366	016E	-	Latin capital letter U with ring above
ů	367	016F	-	Latin small letter u with ring above
Ű	368	0170	-	Latin capital letter U with double acute
ű	369	0171	-	Latin small letter u with double acute
Ų	370	0172	-	Latin capital letter U with ogonek

ų	371	0173	-	Latin small letter u with ogonek
Ŵ	372	0174	-	Latin capital letter W with circumflex
ŵ	373	0175	-	Latin small letter w with circumflex
Ŷ	374	0176	-	Latin capital letter Y with circumflex
ŷ	375	0177	-	Latin small letter y with circumflex
Ÿ	376	0178	Ÿ	Latin capital letter Y with diaeresis
Ź	377	0179	-	Latin capital letter Z with acute
Ź	378	017A	-	Latin small letter z with acute
Ż	379	017B	-	Latin capital letter Z with dot above
Ż	380	017C	-	Latin small letter z with dot above
Ž	381	017D	-	Latin capital letter Z with caron
ž	382	017E	-	Latin small letter z with caron
ſ	383	017F	-	Latin small letter long s

# <u>Latin Extended-B</u>: Unicode U+0180 – U+024F (384–591)

Character	Decimal	Hex	Entity	Description
f	402	0192	ƒ	Latin small letter f with hook
Á	506	01FA	-	Latin capital letter A with ring above and acute
á	507	01FB	-	Latin small letter a with ring above and acute
Æ	508	01FC	-	Latin capital letter AE with acute
é	509	01FD	-	Latin small letter ae with acute
Ø	510	01FE	-	Latin capital letter O with stroke and acute
ģ	511	01FF	_	Latin small letter o with stroke and acute

[<u>TOP</u>]

# **Spacing Modifier Letters**: Unicode U+02B0 – U+02FF (688–767)

Character	Decimal	Hex	Entity	Description
^	710	02C6	ˆ	modifier letter circumflex accent
~	711	02C7	-	caron
-	713	02C9	-	modifier letter macron
U	728	02D8	-	breve
•	729	02D9	-	dot above
0	730	02DA	-	ring above
L	731	02DB	-	ogonek
~	732	02DC	˜	small tilde
"	733	02DD	-	double acute accent

### [<u>TOP</u>]

### **Greek**: Unicode U+0370 - U+03FF (880-1023)

Character	Decimal	Hex	Entity	Description
,	900	0384	-	Greek tonos
.!.	901	0385	-	Greek dialytika tonos
Ά	902	0386	-	Greek capital letter Alpha with tonos
•	903	0387	-	Greek ano teleia
Έ	904	0388	-	Greek capital letter Epsilon with tonos
Ή	905	0389	-	Greek capital letter Eta with tonos
Ί	906	038A	-	Greek capital letter Iota with tonos
Ó	908	038C	-	Greek capital letter Omicron with tonos
'Y	910	038E	-	Greek capital letter Upsilon with tonos
Ώ	911	038F	-	Greek capital letter Omega with tonos
	912	0390	-	Greek small letter Iota with dialytika and tonos

ί				
A	913	0391	Α	Greek capital letter Alpha
В	914	0392	Β	Greek capital letter Beta
Γ	915	0393	Γ	Greek capital letter Gamma
Δ	916	0394	Δ	Greek capital letter Delta
Е	917	0395	Ε	Greek capital letter Epsilon
Z	918	0396	Ζ	Greek capital letter Zeta
Н	919	0397	Η	Greek capital letter Eta
Θ	920	0398	Θ	Greek capital letter Theta
Ι	921	0399	Ι	Greek capital letter Iota
K	922	039A	Κ	Greek capital letter Kappa
Λ	923	039B	Λ	Greek capital letter Lamda
M	924	039C	Μ	Greek capital letter Mu
N	925	039D	Ν	Greek capital letter Nu
[1]	926	039E	Ξ	Greek capital letter Xi
O	927	039F	Ο	Greek capital letter Omicron
П	928	03A0	Π	Greek capital letter Pi
P	929	03A1	Ρ	Greek capital letter Rho
Σ	931	03A3	Σ	Greek capital letter Sigma
T	932	03A4	Τ	Greek capital letter Tau
Y	933	03A5	Υ	Greek capital letter Upsilon
Φ	934	03A6	Φ	Greek capital letter Phi
X	935	03A7	Χ	Greek capital letter Chi
Ψ	936	03A8	Ψ	Greek capital letter Psi

$\Omega$	937	03A9	Ω	Greek capital letter Omega
Ϊ	938	03AA	-	Greek capital letter Iota with dialytika
Ÿ	939	03AB	-	Greek capital letter Upsilon with dialytika
ά	940	03AC	-	Greek small letter alpha with tonos
έ	941	03AD	-	Greek small letter epsilon with tonos
ή	942	03AE	-	Greek small letter eta with tonos
ί	943	03AF	-	Greek small letter iota with tonos
ΰ	944	03B0	-	Greek small letter upsilon with dialytika and tonos
α	945	03B1	α	Greek small letter alpha
β	946	03B2	β	Greek small letter beta
γ	947	03B3	γ	Greek small letter gamma
δ	948	03B4	δ	Greek small letter delta
ε	949	03B5	ε	Greek small letter epsilon
ζ	950	03B6	ζ	Greek small letter zeta
η	951	03B7	η	Greek small letter eta
θ	952	03B8	θ	Greek small letter theta
l	953	03B9	ι	Greek small letter iota
κ	954	03BA	κ	Greek small letter kappa
λ	955	03BB	λ	Greek small letter lamda
μ	956	03BC	μ	Greek small letter mu
ν	957	03BD	ν	Greek small letter nu
ξ	958	03BE	ξ	Greek small letter xi
O	959	03BF	ο	Greek small letter omicron
$\pi$	960	03C0	π	Greek small letter pi

Q	961	03C1	ρ	Greek small letter rho
ς	962	03C2	ς	Greek small letter final sigma
σ	963	03C3	σ	Greek small letter sigma
τ	964	03C4	τ	Greek small letter tau
υ	965	03C5	υ	Greek small letter upsilon
ф	966	03C6	φ	Greek small letter phi
χ	967	03C7	χ	Greek small letter chi
ψ	968	03C8	ψ	Greek small letter psi
ω	969	03C9	ω	Greek small letter omega
ï	970	03CA	-	Greek small letter iota with dialytika
ΰ	971	03CB	-	Greek small letter upsilon with dialytika
ó	972	03CC	-	Greek small letter omicron with tonos
ύ	973	03CD	-	Greek small letter upsilon with tonos
ώ	974	03CE	-	Greek small letter omega with tonos

# **Cyrillic**: Unicode U+0400 - U+04FF (1024-1279)

Character	Decimal	Hex	Entity	Description
Ë	1025	0401	-	Cyrillic capital letter Io
Ъ	1026	0402	-	Cyrillic capital letter Dje
Γ́	1027	0403	-	Cyrillic capital letter Gje
$\epsilon$	1028	0404	-	Cyrillic capital letter Ukrainian Ie
S	1029	0405	-	Cyrillic capital letter Dze
I	1030	0406	-	Cyrillic capital letter Byelorussian-Ukrainian I
Ï	1031	0407	-	Cyrillic capital letter Yi

J	1032	0408	-	Cyrillic capital letter Je
Љ	1033	0409	-	Cyrillic capital letter Lje
Њ	1034	040A	-	Cyrillic capital letter Nje
Ћ	1035	040B	-	Cyrillic capital letter Tshe
Ŕ	1036	040C	-	Cyrillic capital letter Kje
Ÿ	1038	040E	-	Cyrillic capital letter short U
Џ	1039	040F	-	Cyrillic capital letter Dzhe
A	1040	0410	-	Cyrillic capital letter A
Б	1041	0411	-	Cyrillic capital letter Be
В	1042	0412	-	Cyrillic capital letter Ve
Γ	1043	0413	-	Cyrillic capital letter Ghe
Д	1044	0414	-	Cyrillic capital letter De
Е	1045	0415	-	Cyrillic capital letter Ie
Ж	1046	0416	-	Cyrillic capital letter Zhe
3	1047	0417	-	Cyrillic capital letter Ze
И	1048	0418	-	Cyrillic capital letter I
Й	1049	0419	-	Cyrillic capital letter short I
K	1050	041A	-	Cyrillic capital letter Ka
Л	1051	041B	-	Cyrillic capital letter El
M	1052	041C	-	Cyrillic capital letter Em
Н	1053	041D	-	Cyrillic capital letter En
O	1054	041E	-	Cyrillic capital letter O
Π	1055	041F	-	Cyrillic capital letter Pe
P	1056	0420	-	Cyrillic capital letter Er

C	1057	0421	-	Cyrillic capital letter Es
T	1058	0422	-	Cyrillic capital letter Te
У	1059	0423	-	Cyrillic capital letter U
Ф	1060	0424	-	Cyrillic capital letter Ef
X	1061	0425	-	Cyrillic capital letter Ha
Ц	1062	0426	-	Cyrillic capital letter Tse
Ч	1063	0427	-	Cyrillic capital letter Che
Ш	1064	0428	-	Cyrillic capital letter Sha
Щ	1065	0429	-	Cyrillic capital letter Shcha
Ъ	1066	042A	-	Cyrillic capital letter hard sign
Ы	1067	042B	-	Cyrillic capital letter Yeru
Ь	1068	042C	-	Cyrillic capital letter soft sign
Э	1069	042D	-	Cyrillic capital letter E
Ю	1070	042E	-	Cyrillic capital letter Yu
Я	1071	042F	-	Cyrillic capital letter Ya
a	1072	0430	-	Cyrillic small letter a
б	1073	0431	-	Cyrillic small letter be
В	1074	0432	-	Cyrillic small letter ve
Γ	1075	0433	-	Cyrillic small letter ghe
Д	1076	0434	-	Cyrillic small letter de
e	1077	0435	-	Cyrillic small letter ie
Ж	1078	0436	-	Cyrillic small letter zhe
3	1079	0437	-	Cyrillic small letter ze
И	1080	0438	-	Cyrillic small letter i

й	1081	0439	-	Cyrillic small letter short i	
K	1082	043A	-	Cyrillic small letter ka	
Л	1083	043B	-	Cyrillic small letter el	
M	1084	043C	-	Cyrillic small letter em	
Н	1085	043D	-	Cyrillic small letter en	
O	1086	043E	-	Cyrillic small letter o	
П	1087	043F	-	Cyrillic small letter pe	
p	1088	0440	-	Cyrillic small letter er	
c	1089	0441	-	Cyrillic small letter es	
Т	1090	0442	-	Cyrillic small letter te	
У	1091	0443	-	Cyrillic small letter u	
ф	1092	0444	-	Cyrillic small letter ef	
X	1093	0445	-	Cyrillic small letter ha	
Ц	1094	0446	-	Cyrillic small letter tse	
Ч	1095	0447	-	Cyrillic small letter che	
Ш	1096	0448	-	Cyrillic small letter sha	
Щ	1097	0449	-	Cyrillic small letter shcha	
Ъ	1098	044A	-	Cyrillic small letter hard sign	
Ы	1099	044B	-	Cyrillic small letter yeru	
Ь	1100	044C	-	Cyrillic small letter soft sign	
Э	1101	044D	-	Cyrillic small letter e	
Ю	1102	044E	-	Cyrillic small letter yu	
Я	1103	044F	-	Cyrillic small letter ya	
ë	1105	0451	-	Cyrillic small letter io	

þ	1106	0452	-	Cyrillic small letter dje
ŕ	1107	0453	-	Cyrillic small letter gje
€	1108	0454	-	Cyrillic small letter Ukrainian ie
S	1109	0455	-	Cyrillic small letter dze
i	1110	0456	-	Cyrillic small letter Byelorussian-Ukrainian i
ï	1111	0457	-	Cyrillic small letter yi
j	1112	0458	-	Cyrillic small letter je
Љ	1113	0459	-	Cyrillic small letter lje
Њ	1114	045A	-	Cyrillic small letter nje
ħ	1115	045B	-	Cyrillic small letter tshe
K	1116	045C	-	Cyrillic small letter kje
ÿ	1118	045E	-	Cyrillic small letter short u
Џ	1119	045F	-	Cyrillic small letter dzhe
Ґ	1168	0490	-	Cyrillic capital letter Ghe with upturn
Ґ	1169	0491	-	Cyrillic small letter ghe with upturn

# <u>Latin Extended Additional</u>: Unicode U+1E00 – U+1EFF (7680–7935)

Character	Decimal	Hex	Entity	Description
Ŵ	7808	1E80	-	Latin capital letter W with grave
ŵ	7809	1E81	-	Latin small letter w with grave
Ŵ	7810	1E82	-	Latin capital letter W with acute
Ń	7811	1E83	-	Latin small letter w with acute
Ÿ	7812	1E84	-	Latin capital letter W with diaeresis
Ÿ	7813	1E85	-	Latin small letter w with diaeresis

Ŷ	7922	1EF2	_	Latin capital letter Y with grave
ỳ	7923	1EF3	-	Latin small letter y with grave

# **General Punctuation**: Unicode U+2000 – U+206F (8192–8303)

Character	Decimal	Hex	Entity	Description
_	8211	2013	–	en dash
<u>—</u>	8212	2014	—	em dash
	8213	2015	-	horizontal bar
_	8215	2017	-	double low line
6	8216	2018	'	left single quotation mark
,	8217	2019	'	right single quotation mark
,	8218	201A	'	single low-9 quotation mark
t	8219	201B	-	single high-reversed-9 quotation mark
66	8220	201C	"	left double quotation mark
,,	8221	201D	"	right double quotation mark
,,	8222	201E	"	double low-9 quotation mark
<del>†</del>	8224	2020	†	dagger
‡	8225	2021	‡	double dagger
•	8226	2022	•	bullet
• • •	8230	2026	…	horizontal ellipsis
%0	8240	2030	‰	per mille sign
,	8242	2032	′	prime
"	8243	2033	″	double prime
<	8249	2039	‹	single left-pointing angle quotation mark

>	8250	203A	›	single right-pointing angle quotation mark
!!	8252	203C	-	double exclamation mark
_	8254	203E	_	overline
/	8260	2044	⁄	fraction slash

### **Superscripts and Subscripts**: Unicode U+2070 – U+209F (8304–8351)

Character	Decimal	Hex	Entity	Description
n	8319	207F	-	superscript Latin small letter n

#### [<u>TOP</u>]

### **<u>Currency Symbols</u>**: Unicode U+20A0 – U+20CF (8352–8399)

Character	Decimal	Hex	Entity	Description
F	8355	20A3	-	French franc sign
£	8356	20A4	-	lira sign [pound sign is £ (£)]
Pts	8359	20A7	-	peseta sign
€	8364	20AC	€	euro sign

#### [<u>TOP</u>]

### **<u>Letterlike Symbols</u>**: Unicode U+2100 – U+214F (8448–8527)

Character	Decimal	Hex	Entity	Description
%	8453	2105	-	care of
Ł	8467	2113	-	script small 1
$N_{\overline{2}}$	8470	2116	-	numero sign
TM	8482	2122	™	trademark sign
Ω	8486	2126	-	ohm sign
e	8494	212E	-	estimated symbol

### Number Forms: Unicode U+2150 - U+218F (8528-8591)

Character	Decimal	Hex	Entity	Description
1/8	8539	215B	-	vulgar fraction one eighth
3/8	8540	215C	-	vulgar fraction three eighths
5⁄8	8541	215D	-	vulgar fraction five eighths
7/8	8542	215E	-	vulgar fraction seven eighths

#### [<u>TOP</u>]

### Arrows: Unicode U+2190 - U+21FF (8592-8703)

Character	Decimal	Hex	Entity	Description
<b>←</b>	8592	2190	←	leftwards arrow
1	8593	2191	↑	upwards arrow
$\rightarrow$	8594	2192	→	rightwards arrow
<b>↓</b>	8595	2193	↓	downwards arrow
$\leftrightarrow$	8596	2194	↔	left right arrow
<b>1</b>	8597	2195	-	up down arrow
<u></u>	8616	21A8	-	up down arrow with base

#### [<u>TOP</u>]

### **Mathematical Operators**: Unicode U+2200 – U+22FF (8704–8959)

Character	Decimal	Hex	Entity	Description
$\partial$	8706	2202	∂	partial differential
Δ	8710	2206	-	increment
П	8719	220F	∏	n-ary product
Σ	8721	2211	∑	n-ary summation
	8722	2212	−	minus sign

-				
/	8725	2215	-	division slash
•	8729	2219	-	bullet operator
	8730	221A	√	square root
$\infty$	8734	221E	∞	infinity
L	8735	221F	-	right angle
$\cap$	8745	2229	∩	intersection
ſ	8747	222B	∫	integral
≈	8776	2248	≈	almost equal to
<b>≠</b>	8800	2260	≠	not equal to
=	8801	2261	≡	identical to
<b>≤</b>	8804	2264	≤	less-than or equal to
≥	8805	2265	≥	greater-than or equal to

# Miscellaneous Technical: Unicode U+2300 - U+23FF (8960-9215)

Character	Decimal	Hex	Entity	Description
Δ	8962	2302	-	house
_	8976	2310	-	reversed not sign
ſ	8992	2320	-	top half integral
J	8993	2321	-	bottom half integral

#### [<u>TOP</u>]

### **Box Drawing**: Unicode U+2500 – U+257F (9472–9599)

Character	Decimal	Hex	Entity	Description
	9472	2500	-	box drawings light horizontal

	9474	2502	-	box drawings light vertical
Г	9484	250C	-	box drawings light down and right
	9488	2510	-	box drawings light down and left
L	9492	2514	-	box drawings light up and right
	9496	2518	-	box drawings light up and left
<u> </u>	9500	251C	-	box drawings light vertical and right
_	9508	2524	-	box drawings light vertical and left
	9516	252C	-	box drawings light down and horizontal
	9524	2534	-	box drawings light up and horizontal
+	9532	253C	-	box drawings light vertical and horizontal
=	9552	2550	-	box drawings double horizontal
	9553	2551	-	box drawings double vertical
F	9554	2552	-	box drawings down single and right double
Г	9555	2553	-	box drawings down double and right single
iF	9556	2554	-	box drawings double down and right
7	9557	2555	-	box drawings down single and left double
TI T	9558	2556	-	box drawings down double and left single
 ا	9559	2557	-	box drawings double down and left
Ë	9560	2558	-	box drawings up single and right double
L	9561	2559	-	box drawings up double and right single
L	9562	255A	-	box drawings double up and right
╛	9563	255B	-	box drawings up single and left double
Ш	9564	255C	-	box drawings up double and left single
1	9565	255D	-	box drawings double up and left

<b> </b>	9566	255E	-	box drawings vertical single and right double
<b> </b>	9567	255F	-	box drawings vertical double and right single
ŀ	9568	2560	-	box drawings double vertical and right
=	9569	2561	-	box drawings vertical single and left double
$\exists$	9570	2562	-	box drawings vertical double and left single
4	9571	2563	-	box drawings double vertical and left
=	9572	2564	-	box drawings down single and horizontal double
π	9573	2565	-	box drawings down double and horizontal single
īī	9574	2566	-	box drawings double down and horizontal
土	9575	2567	-	box drawings up single and horizontal double
Щ	9576	2568	-	box drawings up double and horizontal single
╨	9577	2569	-	box drawings double up and horizontal
+	9578	256A	-	box drawings vertical single and horizontal double
#	9579	256B	-	box drawings vertical double and horizontal single
l	9580	256C	-	box drawings double vertical and horizontal

### **Block Elements**: Unicode U+2580 - U+259F (9600-9631)

Decimal	Hex	Entity	Description
9600	2580	-	upper half block
9604	2584	-	lower half block
9608	2588	-	full block
9612	258C	-	left half block
9616	2590	-	right half block
9617	2591	-	light shade
	9600 9604 9608 9612 9616	9604 2584 9608 2588 9612 258C 9616 2590	9600 2580 -   9604 2584 -   9608 2588 -   9612 258C -   9616 2590 -

*******	9618	2592	-	medium shade
<b>***</b>	9619	2593	-	dark shade

# **Geometric Shapes**: Unicode U+25A0 - U+25FF (9632-9727)

Character	Decimal	Hex	Entity	Description
-	9632	25A0	-	black square
	9633	25A1	-	white square
	9642	25AA	-	black small square
	9643	25AB	-	white small square
	9644	25AC	-	black rectangle
<b>A</b>	9650	25B2	-	black up-pointing triangle
<b>&gt;</b>	9658	25BA	-	black right-pointing pointer
lacksquare	9660	25BC	-	black down-pointing triangle
<b>◀</b>	9668	25C4	-	black left-pointing pointer
$\Diamond$	9674	25CA	◊	lozenge
0	9675	25CB	-	white circle
•	9679	25CF	-	black circle
	9688	25D8	-	inverse bullet
0	9689	25D9	-	inverse white circle
0	9702	25E6	-	white bullet

### [<u>TOP</u>]

# <u>Miscellaneous Symbols</u>: Unicode U+2600 – U+26FF (9728–9983)

Character	Decimal	Hex	Entity	Description
<b>©</b>	9786	263A	_	white smiling face

•	9787	263B	-	black smiling face
₩	9788	263C	-	white sun with rays
우	9792	2640	-	female sign
ô	9794	2642	-	male sign
<b>^</b>	9824	2660	♠	black spade suit
*	9827	2663	♣	black club suit
•	9829	2665	♥	black heart suit
<b>♦</b>	9830	2666	♦	black diamond suit
<b>5</b>	9834	266A	-	eighth note
<b>.</b>	9835	266B	-	beamed eighth notes

### Private Use Area: Unicode U+E000 - U+F8FF (57344-63743)

Character	Decimal	Hex	Entity	Description
	61441	F001	-	Latin small ligature fi
	61442	F002	-	Latin small ligature fl

#### [<u>TOP</u>]

### <u>Alphabetic Presentation Forms</u> – U+FB00 – U+FB4F (64256–64335)

Character	Decimal	Hex	Entity	Description
fi	64257	FB01	-	Latin small ligature fi
fl	64258	FB02	-	Latin small ligature fl

Top

Copyright © 1999–2007 Alan Wood

Created 12th February 1999 Last updated 17th August 2007

Based in part on <u>ttch04a.doc</u>, part of the <u>TrueType font file specification</u>.

Send comments or questions to Alan Wood

#### Alan Wood's Web site

