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Media Standardized Names

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Abstract

This document specifies standard names to be used to indicate media types, media colors, and media sizes in other standards. These lists of names are a superset of the names that are currently presented in the Printer MIB [PRT-MIB] and the IPP Model and Semantics [IPP-MOD] documents. It is intended to supplement the currently defined lists as well as to provide a normative reference for all subsequent standards.

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90 1 Introduction

91 Media types, media colors, and media sizes have been defined in many previously published standards
92 related to printing. Examples are the ISO Document Printing Application [DPA], the IEEE Transport
93 Independent Printer/System Interface [TIP/SI], the IETF Printer MIB [PRT-MIB], and the IETF
94 Internet Printing Protocol [IPP-MOD]. Although there is a high degree of commonality in the set of
95 media types, colors, and sizes presented in these documents, they do not represent a uniform set.
96 Several other standard developments, in process prior to the creation of this standard, also have a need
97 for media type, color, and size definitions. Also there is a large body of existing computer printing
98 system practice based upon PPD and GPD files to describe a Printer's capabilities that include media
99 type, color, and size. Thus this standard is a response to an urgent need to define a complete set of
100 media types, colors, and sizes, in an independent document, that can be used as a normative reference
101 by other standards.

102 This standard is the result of extensive research to obtain an exhaustive list. It provides a superset of
103 the media types, colors, and sizes currently defined in the previously listed specifications. This
104 standard is intended to update the list that is currently presented in the Printer MIB and the IPP Model
105 and Semantics [IPP-MOD] specification and it also can be referenced by future standards. This
106 document will be periodically updated to include any additional types, colors, and sizes, as required.

107 1.1 Scope

108 This document defines media types, media colors, and media sizes only. Other media attributes such
109 as name, weight, or opacity are not included at this time, though they may be added in the future, if the
110 need arises.

111 No provisions are included to specify roll paper sizes. All media sizes defined represent a cut sheet.
112 Media that is printed and then cut by the printing device can use this standard only to define the final
113 size.

114 The color attribute that is included in a portion of the Media Name entries in both the Printer MIB and
115 IPP are included as a separate independent set of Color Names in this specification.

116 The media size dimensions that are defined in this document are independent of the media feed
117 direction (i.e. short edge feed or long edge feed) or printing orientation (i.e. portrait or landscape).
118 Both of these parameters are best handled by unique attributes rather than overloading the media size
119 attribute.

120 The intent of the names defined in this standard is for program to program communication, not for
121 internal use within a program or for program to human display. Examples include: (1) from a Printer
122 to client software, (2) from client software to a Printer, and (3) from a printer data description file to
123 client software. Typically a client will localize these names to the human language and units of the
124 user before displaying them to the user. However, when a client encounters a name that it does not
125 recognize, these names have been defined so that they can be displayed to the user as a Fallback

126 presentation. Some clients may omit localization in order to simplify implementation of displaying
127 names to users.

128
129 The Media Size Self Describing Name deserves special mention. It contains both a media size name
130 and the dimensions, in case the receiver does not recognize the media size name. Such a receiver can
131 then parse the Media Size Self Describing Name and discover the intended dimensions of such an
132 unrecognized media. These names have also been defined to facilitate parsing and/or Fallback
133 presentation of either the media size name part and/or the dimensions part.

134 2 Terminology

135 This glossary defines certain terms used in this specification which may not be generally familiar or
136 which may be used with very specific meaning. These definitions are not intended to be absolute but
137 do reflect the use of the terms within this specification.

138 **Alias** An alternative name that is commonly used to mean the same as a name standardized in this
139 document, but which is not defined for a use that conforms to this standard.

140 **ASCII** American Standards Code for Information Exchange as defined in ANSI X3.4-1986, "Coded
141 Character Set - 7-bit American Standard Code for Information Interchange (ASCII)." Defines a
142 character set encoding with printable characters defined in the range 0x21 to 0x7E and the SPACE
143 character (0x20). Other encoded values must not be used.

144 **IETF** Internet Engineering Task Force. A volunteer group that develops and approves standards that
145 are relative to the Internet.

146 **ISO** International Organization for Standardization.

147 **Legacy Name** A name used in the same contexts as the names defined in this standard, but which is
148 deprecated from use when conforming to this standard. This name is provided for historical context.

149 **media** The consumable upon which the marking engine marks so as to form a text and/or pictorial
150 image, typically paper.

151 **Media Color Name** The human readable name used to identify the color of the media. Examples:
152 'white', 'red', 'ivory'.

153 **Media Dimensions** The short and long dimensions of the media.

154 **media finish** An adjective that describes the surface texture of the medium. In most cases the texture
155 is obtained by the application of a coating. Examples: 'glossy', 'matte'.

156 **Media Name** The human readable name used to identify media that possess the same characteristics
157 and to distinguishes the media from others with different characteristics for the context in which the
158 Media Name is used. Examples: 'iso-a4-white', 'na-letter-transparency', 'monarch-envelope'. This
159 standard does not define Media Names.

160 **Media Size Name** The human readable name that identifies a particular media size. Examples: ‘iso-
161 a4’, ‘na-letter’, ‘monarch’.

162 **Media Size Self Describing Name** (or **Media Size** for short) An ASCII string that contains a Media
163 Size Name and the Media Dimensions that correspond to the Media Size Name. Examples: ‘iso-
164 a4.2100-2970’, ‘na-letter.8500-11000’, ‘na-monarch.3875-7500’.

165 **Media Type Name** The human readable name that identifies a particular medium type, i.e., the
166 predominate characteristic of the media. Examples: ‘stationery’, ‘transparency’, ‘envelope’.

167 3 Media Type Names

168 The standardized Media Type Names are defined in Table 1. The base set of these names is derived
169 from the Printer MIB [PRT-MIB] and "Media Features for Display, Print, and Fax" [FEATURES]
170 documents. Additional values MAY be registered according to both [TAG-REG] and [IPP-MOD].

171 The *Ref* column indicates the source document(s) for the name.

172 1 = The Printer MIB [PRT-MIB].

173 3 = Media Features for Display, Print, and Fax [FEATURES].

174 5 = IPP Production Printing Attributes [IPP-PROD] The name in this document is derived
175 from the “media-front-coating” and “media-back-coating” member attributes by adding the
176 ‘photographic-’ prefix to the IPP keyword values.
177

178 **Table 1 - Standardized Media Type Names**

Keyword	Description	Ref.
stationery	Separately cut sheets of an opaque material	1, 3
stationery-coated	Separately cut sheets of an opaque material with a coating of unspecified type	
stationery-inkjet	Separately cut sheets of an opaque material whose coating is designed to minimize the spread of liquid inks	
transparency	Separately cut sheets of a transparent material	1, 3
envelope	Envelopes that can be used for conventional mailing purposes	1, 3
envelope-plain	Envelopes that are not preprinted and have no windows	1, 3
envelope-window	Envelopes that have windows for addressing purposes	1
continuous	Continuously connected sheets of an opaque material - which edge is connected is not specified	3
continuous-long	Continuously connected sheets of an opaque material connected along the long edge	1
continuous-short	Continuously connected sheets of an opaque material connected along the short edge	1
tab-stock	Media with tabs [either pre-cut or full-cut]	1
pre-cut-tabs	Media with tabs that are cut so that more than one tab is visible extending out beyond the edge of non-tabbed media in an Output-Documents.	
full-cut-tabs	Media with a tab that runs the full length of the sheet so that only one tab is visible extending out beyond the edge of non-tabbed media in an Output-Documents.	
multi-part-form	Form medium composed of multiple layers not pre-attached to one another; each sheet may be drawn separately from an input source	1
labels	Label stock [For example, a sheet of peel-off labels].	1

179

180

Table 1 - Standardized Media Type Names (continued)

Keyword	Description	Ref.
multi-layer	Form medium composed of multiple layers which are pre-attached to one another; e.g., for use with impact printers.	1
screen	A refreshable display	3
screen-paged	A refreshable display which cannot scroll	3
photographic	Separately cut sheets of an opaque material to produce photographic quality images. The coating is unspecified.	
photographic-glossy	Separately cut sheets of an opaque material that has a "glossy" coating to produce photographic quality images.	5
photographic-high-gloss	Separately cut sheets of an opaque material that has a "high-gloss" coating to produce photographic quality images.	5
photographic-semi-gloss	Separately cut sheets of an opaque material that has a "semi-gloss" coating to produce photographic quality images.	5
photographic-satin	Separately cut sheets of an opaque material that has a "satin" coating to produce photographic quality images.	5
photographic-matte	Separately cut sheets of an opaque material that has a "matte" coating to produce photographic quality images.	5
photographic-film	Separately cut sheets of film used to produce photographic quality images.	
back-print-film	Separately cut sheet of a translucent film that the user can view with or without backlighting.	
cardstock	Separately cut sheets of a heavier or stiffer opaque material than stationery	
roll	A continuous roll of media with no predefined page separation points.	

181 **3.1 Custom Media Type Names**

182 Media Type Names may be locally extended using a Custom Media Type Name, without an update to
 183 this specification. The format is defined by the following ABNF:

```

184 custom-media-type-name = "custom-media-type-" type-name
185 type-name = lowalpha *( lowalpha | digit | "-" )
186 lowalpha = "a" | "b" | "c" | "d" | "e" | "f" | "g" | "h" | "i" |
187           "j" | "k" | "l" | "m" | "n" | "o" | "p" | "q" | "r" |
188           "s" | "t" | "u" | "v" | "w" | "x" | "y" | "z"
189 digit = "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9"
    
```

190 Example, preprinted stationery for company XYZ: `custom-media-type-xyz-letterhead`

191 **4 Media Color Names**

192 Table 2 defines the standardized Media Color Names. These names are derived primarily from the
 193 Printer MIB [PRT-MIB], prtInputMediaColor standard values. One major difference from the Printer
 194 MIB, the name 'transparent' has been replaced by 'no-color'. This allows use of a color attribute with
 195 the media type 'transparency' as defined in Table 1.

196 The *Ref* column indicates in which document(s) the identical name appears.

- 197 1 = The Printer MIB [PRT-MIB].
- 198 5 = I PP Production Printing [IPP-PROD], "media-color" member attribute keywords.

199

Table 2 - Media Color Names

Color Name	Ref.	Description
no-color	5	The specified media has no color. (example, a clear transparency media type)
white	1, 5	The specified media is white.
pink	1, 5	The specified media is pink.
yellow	1,5	The specified media is yellow.
blue	5	The specified media is blue.
green	1, 5	The specified media is green.
buff	1, 5	The specified media is buff.
goldenrod	1, 5	The specified media is goldenrod.
red	5	The specified media is red.
gray	5	The specified media is gray.
ivory	5	The specified media is ivory.
orange	5	The specified media is orange.

200

201 4.1 Custom Media Color Names

202 Media Color Names may be locally extended using a Custom Media Color Name, without an update to
 203 this specification. The format is defined by the following ABNF:

204 `custom-media-color-name = "custom-media-color-" color-name`

205 `color-name = lowalpha *(lowalpha | digit | "-")`

206 `lowalpha = "a" | "b" | "c" | "d" | "e" | "f" | "g" | "h" | "i" |`

207 `"j" | "k" | "l" | "m" | "n" | "o" | "p" | "q" | "r" |`

208 `"s" | "t" | "u" | "v" | "w" | "x" | "y" | "z"`

209 `digit = "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9"`

210 Example, a media of the color mauve: `custom-media-color-mauve`

211 5 Media Size Self Describing Names

212 The media size specifications defined in this document, labeled as Media Size Self Describing Names,
 213 are cross indexed to Legacy Names and Alias (common) names. The Legacy Names define the names
 214 currently used in the ISO DPA, Printer MIB, or IPP documents. A reference column is included in the
 215 tables to indicate which of these three documents contain the Legacy Name.

216 *Ref* column entry definitions:

217 1 = Printer MIB [PRT-MIB] and ISO DPA [DPA]. (Both documents contain an identical set.)

218 2 = IPP [IPP-MOD].

219 4 = ASME Y14 [ASME-IN]

220 5 = ASME Y14.M [ASME-M]

221

222 5.1 Media Size Self Describing Name Format

223 This specification defines a new Media Size Self Describing Name format that is recommended to be
 224 used by all new implementations. This new format has the Media Size Name and the Media
 225 Dimensions embedded within the string and allows a device to operate without a Media Size Name to
 226 Media Dimensions table. The Media Size Self Describing Name format is structured as follows using
 227 ABNF:

```

228   media-size-self-describing-name =
229       prefix "-" size-name "_" short-dim "-" long-dim units
230   prefix = lowalpha *( lowalpha | digit )
231   size-name = ( lowalpha | digit ) *( lowalpha | digit | "-" )
232   short-dim = dim
233   long-dim = dim
234   units = "in" | "mm"
235   dim = integer-part [fraction-part] | "0" fraction-part
236   integer-part = non-zero-digit *digit
237   fraction-part = "." *digit non-zero-digit
238   lowalpha = "a" | "b" | "c" | "d" | "e" | "f" | "g" | "h" | "i" |
239             "j" | "k" | "l" | "m" | "n" | "o" | "p" | "q" | "r" |
240             "s" | "t" | "u" | "v" | "w" | "x" | "y" | "z"
241   non-zero-digit = "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9"
242   digit = "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9"

```

243 **5.1.1 *prefix*** This string part is present to indicate the name space or jurisdiction for the size name in
 244 order to prevent name clashes. Examples include "na" for North America, "iso" for the International
 245 Standards Organization, "jis" for Japanese Information Standard, "jpn" for Japan, "prc" for People's
 246 Republic of China, "roc" for Republic of China (Taiwan), "be" for other English, and "bm" for other
 247 metric, etc.

248 **5.1.2 *size-name*** This string provides a textual description of the media size. It is normally derived
 249 from the Legacy or Alias name associated with the media size. The size-name can consist of multiple
 250 parts, with each part separated by a hyphen (0x2D).

251 **5.1.3 *short-dim* and *long-dim*** These values define the media size. The *short-dim* is always the
 252 smaller of the two dimensions. The dimensions are presented in decimal format to as many places as
 253 necessary to define the size. Trailing zeros must never be used if a decimal portion is present.

254 **5.1.4 *units*** These values define the units of measure for the media size. The units currently defined
 255 are inches (*in*) and millimeters (*mm*). For interchange between programs, the dimensions are never
 256 converted to the other system of units, but must remain as defined in this standard. Furthermore, an
 257 identical size shall never appear in this standard with different units. Programs may convert the
 258 dimensions to other units when displaying these names to human users and for internal use, both of
 259 which are outside the scope of this standard.

260 5.1.5 General

261 The Media Size Self Describing Name shall not contain any space characters (0x20).

262 Wherever possible, the Media Size Self Describing Name has been derived from the Legacy Name. In
263 many cases the 'prefix-size-name' portion is identical to the Legacy Name. In the remaining cases, the
264 'prefix' portion must be ignored to match the Legacy Name.

265 5.1.6 Examples:

266 The letter size (8.5 inches by 11 inches) used in North America: **na-letter_8.5-11in**

267 The iso A4 size (210 mm by 297 mm) used in metric countries: **iso-a4_210-297mm**

268 5.2 Custom Media Size Self Describing Name Format

269 The Custom Media Size Self Describing Name format allows extensibility of the media size set
270 without an update to this specification. This feature is primarily intended for special media sizes that
271 are used at a minimum number of locations. The Media Size Self Describing Name format for custom
272 sizes is almost identical to the format for the standardized sizes.

```
273     custom-media-size-self-describing-name =  
274         "custom" [ "-" size-name ] "_" short-dim "-" long-dim units
```

275 Refer to section 5.1 for the remaining ABNF definitions for the above.

276 **5.2.1 Example:** A custom form measuring 6 inches by 14 inches known as "long and narrow".

277 **custom-long-and-narrow_6-14in** or **custom-ln_6-14in**

278 **5.2.2** The *size-name* "max" shall be reserved to indicate an upper size limit of either a device or
279 application. Also, the *size-name* "min" shall be reserved to indicate a lower size limit. Example: For a
280 device that can process forms as small as 2 x 3 inches to 18 x 36 inches:

281 **custom-max_18-36in** and **custom-min_2-3in**

282 5.3 Conventions for the Tables

283 The rest of this section contains the tables of Media Size Self Describing Names. Within a table
284 entries from different sources are grouped together. The entries in these groups are arranged in order
285 of increasing size of the smaller dimension.

286 The presence of "(envelope)" in the Alias column indicates this size is also commonly used for
287 envelopes. It does not imply that this size is only available as an envelope media type.

288

Table 3 - North American Standard Sheet Media Sizes

Legacy Name	Ref.	Alias (common name)	Self Describing Name (inches)
		index-3x5	na-index-3x5_3x5in
		personal (envelope)	na-personal_3.625x6.5in
monarch-envelope	2		na-monarch_3.875x7.5in
na-number-9-envelope	1, 2		na-number-9_3.875x8.875in
		index-4x6	na-index-4x6_4x6in
na-number-10-envelope	1, 2		na-number-10_4.125x9.5in
		a2 (envelope)	na-a2_4.375x5.75in
		number-11 (envelope)	na-number-11_4.5x10.375in
		number-12 (envelope)	na-number-12_4.75x11in
		5x7	na-5x7_5x7in
		index-5x8	na-index-5x8_5x8in
		number-14 (envelope)	na-number-14_5x11.5in
invoice	2	statement, mini	na-invoice_5.5x8.5in
		index-4x6-ext	na-index-4x6-ext_6x8in
na-6x9-envelope	1, 2	6x9-envelope	na-6x9_6x9in
		c5-envelope	na-c5_6.5x9.5in
na-7x9-envelope	1, 2	7x9 (envelope)	na-7x9_7x9in
executive	2		na-executive_7.25x10.5in
na-8x10	2	government-letter	na-govt-letter_8x10in
		government-legal	na-govt-legal_8x13in
quarto	2		na-quarto_8.5x10.83in
na-letter	1, 2	letter, a, engineering-a	na-letter_8.5x11in
		fanfold-European	na-fanfold-eur_8.5x12in
		letter-plus	na-letter-plus_8.5x12.69in
		foolscap	na-foolscap_8.5x13in
na-legal	1, 2	legal	na-legal_8.5x14in
		super-a	na-super-a_8.94x14in
na-9x11-envelope	1, 2	9x11, letter-tab (envelope)	na-9x11_9x11in
arch-a	2	architecture-a (envelope)	na-arch-a_9x12in
		letter-extra	na-letter-extra_9.5x12in
		legal-extra	na-legal-extra_9.5x15in
		10x11	na-10x11_10x11in
na-10x13-envelope	1, 2	10x13 (envelope)	na-10x13_10x13in
na-10x14-envelope	1, 2	10x14 (envelope)	na-10x14_10x14in
na-10x15-envelope	1, 2	10x15 (envelope)	na-10x15_10x15in
		11x12	na-11x12_11x12in
		edp	na-edp_11x14in
		fanfold-us	na-fanfold-us_11x14.875in
		11x15	na-11x15_11x15in
ledger	2	b, engineering-b	na-ledger_11x17in

289

290

Table 3 - North American Standard Sheet Media Sizes (continued)

Legacy Name	Ref.	Alias (common name)	Self Describing Name (inches)
		european-edp	na-eur-edp_12x14in
arch-b	2	architecture-b, tabloid-extra	na-arch-b_12x18in
		b-plus	na-b-plus_12x19.17in
		super-b	na-super-b_13x19in
c	2	engineering-c	na-c_17x22in
arch-c	2	architecture-c	na-arch-c_18x24in
d	2	engineering-d	na-d_22x34in
arch-d	2	architecture-d	na-arch-d_24x36in
f	5	e1	na-asme-f_28x40in
		wide-format	na-wide-format_30x42in
e	2	engineering-e	na-e_34x44in
arch-e	2	architecture-e	na-arch-e_36x48in
		f, engineering-f	na-f_44x68in

291

292

293

Table 4 - ISO Standard Sheet Media Sizes

Legacy Name	Ref.	Alias (common name)	Self Describing Name (mm)
iso-a10	1, 2	a10	iso-a10_26x37mm
iso-a9	1, 2	a9	iso-a9_37x52mm
iso-a8	1, 2	a8	iso-a8_52x74mm
iso-a7	1, 2	a7	iso-a7_74x105mm
iso-a6	1, 2	a6	iso-a6_105x148mm
iso-a5	1, 2	a5	iso-a5_148x210mm
		a5-extra	iso-a5-extra_174x235mm
iso-a4	1, 2	a4	iso-a4_210x297mm
		a4-tab	iso-a4-tab_225x297mm
		a4-extra	iso-a4-extra_235.5x322.3mm
iso-a3	1, 2	a3	iso-a3_297x420mm
iso-a4x3, a4x3	2, 4		iso-a4x3_297x630mm
iso-a4x4, a4x4	2, 4		iso-a4x4_297x841mm
iso-a4x5, a4x5	2, 4		iso-a4x5_297x1051mm
iso-a4x6, a4x6	2, 4		iso-a4x6_297x1261mm
iso-a4x7, a4x7	2, 4		iso-a4x7_297x1471mm
iso-a4x8, a4x8	2, 4		iso-a4x8_297x1682mm
iso-a4x9, a4x9	2, 4		iso-a4x9_297x1892mm
iso-a3-extra			iso-a3-extra_322x445mm
iso-a2	1, 2	a2	iso-a2_420x594mm
iso-a3x3, a3x3	2, 4		iso-a3x3_420x891mm
iso-a3x4, a3x4	2, 4		iso-a3x4_420x1189mm
iso-a3x5, a3x5	2, 4		iso-a3x5_420x1486mm
iso-a3x6, a3x6	2, 4		iso-a3x6_420x1783mm
iso-a3x7, a3x7	2, 4		iso-a3x7_420x2080mm
iso-a1	1, 2	a1	iso-a1_594x841mm

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Table 4 - ISO Standard Sheet Media Sizes (continued)

Legacy Name	Ref.	Alias (common name)	Self Describing Name (mm)
iso-a2x3, a2x3	2, 4		iso-a2x3_594x1261mm
iso-a2x4, a2x4	2, 4		iso-a2x4_594x1682mm
iso-a2x5, a2x5	2, 4		iso-a2x5_594x2102mm
iso-a0	1, 2		iso-a0_841x1189mm
iso-a1x3, a1x3	2, 4		iso-a1x3_841x1783mm
iso-a1x4, a1x4	2, 4		iso-a1x4_841x2378mm
a0x2	4	2a0	iso-2a0_1189x1682mm
a0x3	4		iso-a0x3_1189x2523mm
		4a0	iso-4a0_1682x2378mm
iso-b10	1, 2	b10	iso-b10_31x44mm
iso-b9	1, 2	b9	iso-b9_44x62mm
iso-b8	1, 2	b8	iso-b8_62x88mm
iso-b7	1, 2	b7	iso-b7_88x125mm
iso-b6	1, 2	b6 (envelope) b6/c4 (envelope)	iso-b6_125x176mm iso-b6c4_125x324mm
iso-b5	1, 2	b5 (envelope) b5-extra	iso-b5_176x250mm iso-b5-extra_201x276mm
iso-b4	1, 2	b4 (envelope)	iso-b4_250x353mm
iso-b3	1, 2	b3	iso-b3_353x500mm
iso-b2	1, 2	b2	iso-b2_500x707mm
iso-b1	1, 2	b1	iso-b1_707x1000mm
iso-b0	1, 2	b0	iso-b0_1000x1414mm
		c10 (envelope)	iso-c10_28x40mm
		c9 (envelope)	iso-c9_40x57mm
iso-c8	1	c8 (envelope)	iso-c8_57x81mm
iso-c7	1	c7 (envelope)	iso-c7_81x114mm
		c7/c6 (envelope)	iso-c7c6_81x162mm
iso-c6	1, 2	c6 (envelope) c6/c5 (envelope)	iso-c6_114x162mm iso-c6c5_114x229mm
iso-c5	1, 2	c5 (envelope)	iso-c5_162x229mm
iso-c4	1, 2	c4 (envelope)	iso-c4_229x324mm
iso-c3	1, 2	c3 (envelope)	iso-c3_324x458mm
iso-c2	1	c2 (envelope)	iso-c2_458x648mm
iso-c1	1	c1 (envelope)	iso-c1_648x917mm
iso-c0	1	c0 (envelope)	iso-c0_917x1297mm
iso-designated	1, 2	designated-long, dl (envelope)	iso-dl_110x220mm
iso-ra2			iso-ra2_430x610mm
iso-sra2			iso-sra2_450x640mm
iso-ra1			iso-ra1_610x860mm
iso-sra1			iso-sra1_640x900mm
iso-ra0			iso-ra0_860x1220mm
iso-sra0			iso-sra0_900x1280mm

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Table 5 - Japanese Standard Sheet Media Sizes

Legacy Name	Ref.	Alias (common name)	Self Describing Name (mm)
jis-b10	1, 2		jis-b10_32x45mm
jis-b9	1, 2		jis-b9_45x64mm
jis-b8	1, 2		jis-b8_64x91mm
jis-b7	1, 2		jis-b7_91x128mm
jis-b6	1, 2		jis-b6_128x182mm
jis-b5	1, 2		jis-b5_182x257mm
jis-b4	1, 2		jis-b4_257x364mm
jis-b3	1, 2		jis-b3_364x515mm
jis-b2	1, 2		jis-b2_515x728mm
jis-b1	1, 2		jis-b1_728x1030mm
jis-b0	1, 2		jis-b0_1030x1456mm
		exec	jis-exec_216x330mm
		chou4 (envelope)	jpn-chou4_90x205mm
		hagaki (postcard)	jpn-hagaki_100x148mm
		you4 (envelope)	jpn-you4_105x235mm
		chou2 (envelope)	jpn-chou2_111.1x146mm
		chou3 (envelope)	jpn-chou3_120x235mm
		oufuku (postcard)	jpn-oufuku_148x200mm
		Kahu (envelope)	jpn-kahu_240x322.1mm
		kaku2 (envelope)	jpn-kaku2_240x332mm
)	

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Table 6 - Chinese Standard Sheet Media Sizes

Legacy Name	Ref.	Alias (common name)	Self Describing Name (mm)
		prc-32k	prc-32k_97x151mm
		prc1 (envelope)	prc-1_102x165mm
		prc2 (envelope)	prc-2_102x176mm
		prc4 (envelope)	prc-4_110x208mm
		prc5 (envelope)	prc-5_110x220mm
		prc8 (envelope)	prc-8_120x309mm
		prc6 (envelope)	prc-6_120x320mm
		prc3 (envelope)	prc-3_125x176mm
		prc-16k	prc-16k_146x215mm
		prc7 (envelope)	prc-7_160x230mm
		roc-16k	roc-16k_195x270mm
		juuro-ku-kai	om-juuro-ku-kai_198x275mm
		prc9 (envelope)	prc-9_229x324mm
		pa-kai	om-pa-kai_267x389mm
		roc-8k	roc-8k_270x390mm
		dai-pa-kai	om-dai-pa-kai_275x395mm
		prc10 (envelope)	prc-10_324x458mm

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Table 7 - Other Metric Standard Sheet Media Sizes

Legacy Name	Ref.	Alias (common name)	Self Describing Name (mm)
		Italian (envelope)	om-italian_100x230mm
		Postfix (envelope)	om-postfix_114x229mm
folio	2		om-folio_210x330mm
		folio-sp	om-folio-sp_215x315mm
		Invite (envelope)	om-invite_220x220mm

303

304 6 Conformance Requirements

305 The Media Type Names, Media Color Names, and Self Describing Media Size Names defined in this
 306 document are recommended for any future specifications that have a need for media type, media color,
 307 media size definitions, or media finish, respectively. The proper procedure for including these names
 308 is to simply reference this specification as the definition and source of the media types, colors, or sizes
 309 with the clause "or subsequent revisions". In this manner, any updates to this document are
 310 automatically included in the referencing specification.

311 Media Names defined in this specification are presented using lower case characters. Other referencing
 312 standards may impose case sensitive rules if necessary. For interoperability and implementation
 313 efficiency, this standard strongly recommends these names be used in the lower case form defined in
 314 this document.

315 7 Internationalization Considerations

316 All standardized textual strings must be represented as US-ASCII character codes and local
 317 translations must never be performed. Custom sizes, if limited to local use, may be represented using
 318 any desired character set.

319 8 Security Considerations

320 This specification will have no impact on the security burden of or potential threats to the importing
 321 system.

322 9 References

323 [ASME-IN]

324 ASME Y14-1995, Decimal Inch Drawing Sheet Size and Format, The American Society of
 325 Mechanical Engineers.

326 [ASME-M]

327 ASME Y14.M-1995, Metric Drawing Sheet Size and Format, The American Society of
 328 Mechanical Engineers.

- 329 [DPA]
330 ISO/IEC 10175, Document Printing Application, June 1996.
- 331 [FEATURES]
332 Masinter, L., et al, "Media Features for Display, Print, and Fax", RFC 2534, March 1999.
- 333 [IPP-MOD]
334 Hastings, T., Herriot, R., deBry, R., Isaacson, S., and P. Powell, "Internet Printing Protocol/1.1:
335 Model and Semantics", RFC 2911, September 2000.
- 336 [IPP-PROD]
337 IEEE-ISTO Std. 5100.3-2001, IPP Production Printing Attributes – Set 1, February 2001.
338 Available at: <ftp://ftp.pwg.org/pub/pwg/standards/pwg5100.3.pdf>, .doc, .rtf
- 339 [PRT-MIB]
340 Smith, R., Wright, F., Hastings, T., Zilles, S., Gyllenskog, J., "Printer MIB", RFC 1759, March
341 1995.
- 342 [TAG-REG]
343 Holtman, K., Mutz, A. and T. Hardie, "Feature Tag Registration Procedures", BCP 31, RFC
344 2506, March 1999.
- 345 [TIP/SI]
346 IEEE Std 1284.1-1997, IEEE Standard for Information Technology, Transport Independent
347 Printer/System Interface.

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373 IPP Mailing List: ipp@pwg.org

374 To subscribe to the ipp mailing list, send the following email:

375 1) send it to majordomo@pwg.org

376 2) leave the subject line blank

377 3) put the following two lines in the message body:

378 subscribe ipp

379 end

380 Implementers of this specification are encouraged to join the IPP Mailing List in order to participate in
381 any discussions of clarifications or review of registration proposals for additional names. Requests for
382 additional names, for inclusion in this specification, should be sent to the IPP Mailing list for
383 consideration.

384 11 Appendix A: Media Names Usage in Existing Standards (informative)

385 This appendix provides a cross reference between the usage of media names in existing standards and
386 the appropriate group in this document. Future revisions of these standards should reference this
387 document as the source of this information. No attempt will be made to update this appendix when
388 additional standards reference this document; the existing references will suffice.

389 The Printer MIB [PRT-MIB]

390

Standard Media Name	Printer MIB usage
Media Type Name	prtInputMediaType
Media Color Name	prtInputMediaColor
Media Size Name	Appendix B "Media Sizes Names" (see note 1)

391 The Internet Printing Protocol, Model and Semantics [IPP-MOD]

392

Standard Media Name	IPP Model Usage
Media Type Name	Keyword values of the "media" Job Template attribute, including the "media-default", "media-ready", and "media-supported" Printer attributes
Media Size Self Describing Name	Keyword values of the "media" Job Template attribute, including the "media-default", "media-ready", and "media-supported" Printer attributes

393 **The Internet Printing Protocol, Production Printing Attributes [IPP-PROD]**

394

Standard Media Name	IPP Production Printing Usage (see notes 2 and 3)
Media Type Name	Keyword values of the "media-type"
Media Color Name	Keyword values of the "media-color"

395 **Notes:**

- 396 1. Printer MIB size names do not include the dimensions part. The dimension are represented by the
 397 objects prtInputMediaDimFeedDirDeclared, prtInputMediaDimXFeedDirDeclared,
 398 prtInputMediaDimFeedDirChosen, and prtInputMediaDimXFeedDirChosen.
- 399 2. The Production Printing Attributes referenced are all member attributes of the "media-col" Job
 400 Template attribute.
- 401 3. The media sizes are included in the "media-size" member attribute of the "media-col" Job
 402 Template attribute as a pair of numeric values (mm/100).

403 **12 Appendix B: Description of the IEEE Industry Standards and Technology**

404 **(ISTO)**

405 The IEEE-ISTO is a not-for-profit corporation offering industry groups an innovative and flexible
 406 operational forum and support services. The IEEE-ISTO provides a forum not only to develop
 407 standards, but also to facilitate activities that support the implementation and acceptance of standards
 408 in the marketplace. The organization is affiliated with the IEEE (<http://www.ieee.org/>) and the IEEE
 409 Standards Association (<http://standards.ieee.org/>).

410 For additional information regarding the IEEE-ISTO and its industry programs visit:
 411 <http://www.ieee-isto.org>

412 **13 Appendix C: Description of the IEEE-ISTO PWG**

413 The Printer Working Group (or PWG) is a Program of the IEEE Industry Standards and Technology
 414 Organization (ISTO) with member organizations including printer manufacturers, print server
 415 developers, operating system providers, network operating systems providers, network connectivity
 416 vendors, and print management application developers. The group is chartered to make printers and
 417 the applications and operating systems supporting them work together better. All references to the
 418 PWG in this document implicitly mean "The Printer Working Group, a Program of the IEEE ISTO." In
 419 order to meet this objective, the PWG will document the results of their work as open standards that
 420 define print related protocols, interfaces, procedures and conventions. Printer manufacturers and
 421 vendors of printer related software will benefit from the interoperability provided by voluntary
 422 conformance to these standards.

423 In general, a PWG standard is a specification that is stable, well understood, and is technically
 424 competent, has multiple, independent and interoperable implementations with substantial operational
 425 experience, and enjoys significant public support.

426 For additional information regarding the Printer Working Group visit:
 427 <http://www.pwg.org>

428 **14 Appendix D: Change History [to be removed when the standard is approved]**

429 **14.1 Changes to D0.7, April 20, 2001, to make D0.8, May 7, 2001**

430 The following changes were made:

431

- 432 1. Section 2: Changed "Media Finish Name" to "media finish" and modified the definition.
- 433 2. Added IPP Production Printing Attributes as a reference to section 3 and 4. Modified table 1 and 2
- 434 adding a "5" in the reference column to indicate this document references the appropriate entry.
- 435 3. Added "stationery-coated", "stationery-inkjet", "photographic-high-gloss", "photographic-semi-
- 436 gloss", "photographic-satin", "photographic-matte", "photographic-film", and "back-print-film" to
- 437 table 1.
- 438 4. Major revision of section 5 to conform to new agreed format.
- 439 5. Table 2: Changed "...should have.." to "...has..." Changed "...should be.." to "...is..."
- 440 6. Added "f" as a legacy name to "na-e1_28-40in" in table 3. Changed " na-e1" to "asme-f".
- 441 7. Added "a0x3" as a legacy name to "iso-2a0_1189-1682mm" in table 4.
- 442 8. Added to table 4; "a4x3", "a4x4", "a4x5", "a4x6", "a4x7", "a4x8", "a4x9", "a3x3", "a3x4", "a3x5",
- 443 "a3x6", "a3x7", "a2x3", "a2x4", "a2x5", "a1x3", "a1x4", and "a0x3".
- 444 9. Moved na-roc-16k and na-roc-8k to Chinese table (6), removed "na-" and dimensions changed to
- 445 mm. It was pointed out by Don Levinstone (WaveMark Solutions) that roc is Republic of China
- 446 (now Taiwan).
- 447 10. Removed section 6 "Media Finish Names". All mention of Finish Names and Finishings also
- 448 removed from sections 1 and new 6.
- 449 11. Added a reference for ASME Y14 to section 9.
- 450 12. Appendix A, table for IPP-MOD: Added a new row with "Media Self Describing Name" in column
- 451 1 and column 2 identical to the previous row. Added "Keyword values of the ..." to column 2.
- 452 13. Appendix a, table for IPP-PROD: Deleted MediaFinish Name row. Added "Keyword values of the
- 453 ..." to both remaining column 2's.

454 **14.2 Changes to D0.6, April 9, 2001, to make D0.7, April 20, 2001**

455 The following changes were made:

456

- 457 1. Added to definition of Legacy Name: "This name is provided for historical context."
- 458 2. Removed single quotes from color names in table 2.
- 459 3. Added an example to paragraphs 3.1, 4.1 and 6.1.
- 460 4. Removed "The prefix string shall be included in all Media Size Self Describing Names that contain
- 461 size dimensions that are to be interpreted as English units." This sentence was redundant.
- 462 5. Corrected "iso-a5-extra" name in Table 4. The "-extra" part was missing.
- 463 6. Removed single quotes from finish names and "MUST" from the definitions in table 8.
- 464 7. Changed "custom-finish-type-" to "custom-media-finish-" in section 6.1.
- 465 8. Inserted a new Appendix A "Media Names Usage in Existing Standards (informative)".
- 466 9. Changed all RFC references to names that are independent of the numbers.
- 467 10. Added a URL to the IPP-PROD reference.

468 **14.3 Changes to D0.5, March 26, 2001, to make D0.6, April 9, 2001**

469 The following changes were made:

470

- 471 1. Added "Media Finish Name" definition to section 1, 1.1, 2, and 7.
- 472 2. Removed "other" from Table 1. The custom media type name is to be used instead.
- 473 3. Added "roll" to Table 1.
- 474 4. Changed "[REG]" to "[RFC2506]" in section 3 and added the reference information to section 10.
- 475 5. Corrected the ABNF for "size-name" in section 5.1 (removed second "| "-" ").
- 476 6. Removed text regarding case sensitivity from section 5.1.4. New text on this subject added to
- 477 section 7.
- 478 7. Corrected second example in section 5.1.5 ("2970" was "29700").
- 479 8. Added 5.2.5 to define "custom-max" and "custom-min".
- 480 9. Added section 6, Media Finish Names.
- 481 10. Added [PROD] reference to section 10.
- 482 11. Added IPP contact information to section 10, plus a sentence explaining how to request new names
- 483 to be added to the document.

484

485 **14.4 Changes to D0.4, March 21, 2001, to make D0.5, March 26, 2001**

486 The following changes were made:

487

- 488 1. Title in Abstract corrected. Was "Media Size Standardized Names."
- 489 2. Section 1 "...practice based upon PPD and GPD files to describe..." was "...practice around PPD
- 490 and GPD files that describe..."
- 491 3. In definition for Media Size Self Describing Name: "...Media Dimensions that correspond to the
- 492 Media Size Name." was "...Media Dimensions of that correspond to its Media Size Name."
- 493 4. Replaced "Printer MIB" and "RFC 2534" columns in Table 1 with "Ref." Column, to be more
- 494 consistent with the size tables. Modified the text accordingly.
- 495 5. Added section 3.1 Custom Media Type Names.
- 496 6. Added a "Ref." Column to Table 2 and removed the text that attempted to provide this same
- 497 information.
- 498 7. Added section 4.1 Custom Media Color Names.
- 499 8. Combined paragraphs 5.1.5 and 5.1.6.
- 500 9. Added to paragraph 5.3: "The presence of "(envelope)" in the Alias column indicates this size is
- 501 also commonly used for envelopes. It does not imply that this size is only available as an envelope
- 502 media type."
- 503 10. Merged envelope sizes into the corresponding sheet sizes tables. The string "envelope" has been
- 504 removed from all envelope size names.
- 505 11. Added "government-legal" to Table 3.
- 506 12. Added "juuro-ku-kai", "pa-kai", and "dai-pa_kai" to Table 6.
- 507 13. Removed "IANA Considerations" section.

508

509 **14.5 Changes to D0.3, February 22, 2001, to make D0.4, March 21, 2001**

510 The following changes were made:

- 511
- 512 1. Added more Terminology
 - 513 2. Added Media Type Names
 - 514 3. Added Media Color Names
 - 515 4. Used ABNF to define the syntax for Media Size Self Describing Names