



Specifications for Reproduction of New York State Employment Tax Forms

The Tax Department reserves the right to reject any reproduced form that does not meet these specifications.

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I. General information

- A. You can reproduce any New York State employment tax form listed in section II below. The reproduction **must** be substantially identical to the official New York State version. Official versions are available as printed forms distributed by the Tax Department.
- B. No specific method of reproduction requires approval. You can use conventional printing processes or laser quality printers. You may not computer-generate forms (print data fields only on blank paper). However, **all employment tax forms are designed to be scannable**, and to ensure compatibility with our scanning equipment, **reproductions must be submitted for approval**. The substitute versions of forms should include the suffix **-MN** after the form number. This suffix indicates a manual version of the form, which differs from our preprinted versions. Deadlines for submission for approval for the beginning of the calendar year are as follows:
 - November 15 - Form NYS-1-MN, *Return of Tax Withheld*
 - December 15 - Quarterly Combined Withholding, Wage Reporting, and Unemployment Insurance Returns (Forms NYS-45-MN, NYS-45-ATT-MN, and NYS-45-X-MN)
- C. All reproduced returns must bear a department-assigned form and print source identification code number in the form of a barcode (or a Form ID line for Form NYS-1-MN). You must submit a request for a print source identification code to the address shown in section XV on page 6.
- D. All forms must be highly legible in every aspect, including printing, barcodes, scan line, and variable information.
- E. The Tax Department requires that returns be filed bearing the original signatures; copies of the signature are not allowed. To ensure accuracy in the processing of **any** forms submitted, **do not** complete forms in pencil. **Make entries in black ink only**. Your software should instruct users to never make entries on these forms in pencil or red ink.

II. Reproducible forms

The extension of **-MN** after the form number simply refers to a manual version (not computer-produced by the Tax Department); please use the **-MN** extension on your substitute forms. The paper color must be white.

Form number	Pages	Paper color	Official size (in inches)
NYS-1-MN	2	white	7 × 3 ² / ₃ * [*]
NYS-45-MN	2	white	8½ × 11
NYS-45-X-MN	2	white	8½ × 11
NYS-45-ATT-MN	1	white	8½ × 11

* Print this form in the lower right corner of the page and instruct employers to cut it to size.

III. Paper specifications

You should use high reflectance white paper with good opacity. The basic requirement is that the material must meet the ANSI Standard X9.18 specifications. These specifications include requirements for the physical characteristics of the paper, such as weight, grain direction, and smoothness. The ideal paper is 24-pound bond with a minimum reflectance of 70% and opacity of 75%.

IV. Ink color

You must use black for all reproduced images. Preparers need not reproduce most areas that appear in color **drop-out** ink on original scannable forms. However, **For office use only** areas that appear in **drop-out** ink must be reproduced in black ink.

V. Page, image, and margin sizes

Reproductions must be substantially identical to the official form in page, image, and margin size. Reproductions of Form NYS-1-MN, *Return of Tax Withheld*, must be printed at the bottom-right corner of the page with perforations or cut lines indicated along the top and left sides. We ask that you print this form at the bottom-right corner of the page so that the bottom and right edges are perfectly straight. We also ask you to remind your clients to cut the form to the final size of 7" × 3²/₃" before mailing it in with their payments. Our Web site version of this form reflects this requested layout.

VI. Type font and size

A. Instructional text

Almost all New York State forms are printed using Helvetica or a similar type font. The size of type must be substantially identical to that used on the official form. See examples below.

Actual	1	Wages, salaries, tips, etc.
Unacceptable font	1	<i>Wages, salaries, tips, etc.</i>
Unacceptable type size	1	Wages, salaries, tips, etc.

B. Variable data

The variable data printed on the forms must be in a 12-point nonproportional font. Courier font is preferred, but a similar type font may be used. Please specify your font when submitting forms for approval.

VII. Other general reproduction issues

Do not use boxes, slashes, or dashes for any of the ID-number, telephone number, or date fields. For social security numbers, print the nine digits sequentially with no spaces or other characters. We prefer that no parentheses be used around telephone area codes.

Decimals are required. This will ensure that there is a definitive distinction between the dollars and cents columns.

Do not use commas for dollar amounts.

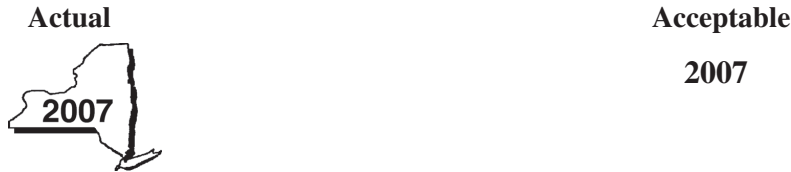
Check-off box entry areas should **not** be enclosed with a box on substitute forms. Software should simply print the *X* consistently in the same place, where the box appears on the NYS version of the form.

For machine printing, spacing must be consistent, with no spaces between characters.

The UI employer registration number and the withholding identification number must be printed to the right of, not below, the field name.

VIII. Unique logos

Reproduction of unique logos on forms is not required. See example below.



IX. Pages to be reproduced

You must support all pages of a form with possible entries even if entries are not required on every page by a particular taxpayer. If a taxpayer does not need to make any entries on the back page of Form NYS-45 or NYS-45-X, the taxpayer does **not** need to include that page when sending his or her return. Pages consisting solely of instructions, laws, or regulations need not be reproduced.

X. Arrangement of forms

Use both sides of the paper so that reproduced forms have the same page arrangement as that of the official form. However, we will accept multi-paged forms on separate pieces of paper if the entire original page layout remains intact (meaning you did not shift form content from one page to another).

XI. Equipment

We will not approve or disapprove specific equipment used to reproduce official forms. All reproductions, however, must satisfy the conditions stated in these specifications.

XII. Taxpayers' signatures

All taxpayers' signatures on reproduced forms filed must be original signatures written on the forms after reproduction.

XIII. Computer-prepared forms and envelopes

All forms may be computer-prepared (filled in by a computer-peripheral device).

All forms may be computer-produced (designed and filled in by a computer-peripheral device such as a laser printer) if the forms are substantially identical to the official New York State version.

In addition to the other provisions of these specifications, the following conditions apply to computer-prepared forms:

- A. You cannot computer-generate New York State employment tax forms (that is, produce the data fields only, line by line, using a computer-peripheral device on blank printout paper).

You must preprint these forms using conventional printing processes, laser printers, photocopying, or similar reproduction processes. The forms may be filled in using computer or word-processing equipment, but the reproduced forms must be substantially identical to the official New York State versions.

- B. **Prior approval of all scannable New York State forms is required prior to taxpayer use.** Deadlines for submission for approval are as follows:

November 15 - *Return of Tax Withheld* (Form NYS-1-MN)

December 15 - Quarterly Combined Withholding, Wage Reporting and Unemployment Insurance Returns (Forms NYS-45-MN, NYS-45-ATT-MN, and NYS-45-X-MN)

- C. You must compute check digits for both the withholding identification number and UI employer registration number.

See sections XVI and XVII on page 7 for an explanation of both check digit computations. **Failure to compute the check digits accurately or in the required format will result in rejection of the return.**

The withholding check digit must appear following a 9-character identification number and 4 spaces, or following an 11-character identification number and 2 spaces.

The UI check digit must appear following a 7-character number and 2 spaces. Do not print slashes and dashes between the numbers and the check digit.

- D. On Form NYS-45, the unemployment insurance tax rate appears both as a percentage and as a multiplication factor. The tax rate percentage appears as one digit to the left of the decimal and three digits to the right of the decimal. The multiplication factor appears as five digits to the right of the decimal. (The re-employment service fund contribution appears as a multiplication factor of five digits to the right of the decimal.) On the amended return, Form NYS-45-X-MN, the tax rate percentage appears as one digit to the left of the decimal and one digit to the right of the decimal. (The re-employment service fund contribution is not separated out but is included in the tax rate percentage on the amended return.)

- E. You **must notify** the Forms and Publications Management section of a programming error as soon as it is discovered. (See section XV on page 6 for the address.)

Please indicate:

- the exact nature of the error;
- the date the error was discovered;
- the number of incorrect forms prepared;
- the corrective action taken; and
- the person to contact for further information.

- F. You may computer-produce envelopes provided they meet postal regulations.

- G. Employers with more employee/payee records than will fit on Form NYS-45-ATT may computer-produce and file **continuation sheets** in place of additional NYS-45-ATT forms. The computer-produced continuation sheets must include certain data items and information to be acceptable. As on all computer-produced withholding forms, the employer/payer identification number must include the check digit as listed on the original form or computed according to the instructions in this publication. **Continuation sheets must contain the items shown below and must use the general layout of the example below.** If you use a format that is different from the example below, you must submit a sample of the continuation sheet for prior approval; see section XV on page 6 for the address. Do not use dashes or slashes in any of the entries. You must include page totals for columns c, d, and e.

Format and contents of continuation sheet:

New York State Withholding Tax Quarterly Combined Withholding, Wage Reporting, and Unemployment Insurance Return - Attachment NYS-45-ATT Continuation Sheet						Page _____ of _____
Withholding ID# _____		Legal name: _____				
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Tax Yr
		[]	[]	[]	[]	yy ____
				Seasonal []		
				Wages []	Other wages []	
					Amended return []	
				UI Total remuneration/ gross wages paid this quarter	Gross wages subject to withholding	Total tax withheld
Social security number	Last name, first name, middle initial			c	d	e
a	b					
999999999	Public, John Q			10000.00	10000.00	10000.00

XIV. Barcodes and Form ID numbers

All versions of New York State employment tax returns have a form identification code to identify the form for our scanning equipment. The form identification code is represented by a barcode on the quarterly combined withholding, wage reporting, and unemployment insurance returns, and by a Form ID number on Form NYS-1-MN, *Return of Tax Withheld*.

Barcode description and form construction (for Forms NYS-45-MN, NYS-45-ATT-MN, and NYS-45-X-MN)

The barcode is industry standard interleaved 2 of 5. The barcode consists of eight digits:

- The first digit indicates the form type. (1 = NYS-1, 4 = NYS-45, 5 = NYS-45-X, and 6 = NYS-45-ATT)
- The second and third digits indicate the last two digits of the tax year.
- The fourth digit is a sequence number indicating the version of a form for a particular year from a particular print source. (Each time a form is revised during the same year, the version digit should be increased by one.)
- The fifth and sixth digits indicate the print source. Each vendor will be assigned a unique print source code; to obtain your print source code, contact the Tax Department (see section XV for contact information).
- The seventh digit is a 1 or 2 indicating front (1) or back (2) of the form.
- The eighth digit is a check digit computed from the first seven digits (see below).

Barcode check digit calculation (based on the first seven digits):

1. From right to left, add the digits in the odd positions.
2. Multiply this sum by 3.
3. From right to left, add the digits in the even positions.
4. Add this sum to the product of step 2.
5. The modulo-10 check digit is the smallest number that when added to the sum of Step 4 produces a multiple of 10.

Example: *Sample barcode data without check digit: 5023761*

1. *Sum of odd positions 1 + 7 + 2 + 5 = 15*

2. *Multiply 15 X 3 = 45*

3. *Sum of even positions 6 + 3 + 0 = 9*

4. *Add 45 + 9 = 54*

5. *54 + 6 = 60 (check digit = 6)*

Therefore: Data + check digit = 50237616 (complete barcode number)

Additional barcode information

The barcode may be constructed either graphically as a string of ASCII box characters or scanned onto the form as a bit map.

The height of the barcode is .375".

The barcode characters should be compressed to 5.36 characters per inch.

The spaces and bars are constructed at 2:1 ratio.

The elements of the barcode are:

- 1-point bar
- 1-point space
- 2-point bar
- 2-point space

The barcode must be applied to the form in the area where it appears on the original version of the form. The numerical translation of the barcode must be printed beneath the barcode.

Form ID number description and construction (for Form NYS-1-MN, *Return of Tax Withheld*)

The Form ID consists of the form identification code in numeric. You must print the Form ID in OCRA font, type 1, at 10 characters per inch at the bottom right of Form NYS-1-MN.

The center line of the Form ID must be between 0.375" and .5" from the bottom of the form. The Form ID is 8 character positions, and the last character must be between 0.25" and .375" from the right side of the form. The 8 characters consist of the 8 numeric characters of the form identification code:

- The first character indicates the form type, which is 1 for Form NYS-1-MN.
- The second and third characters indicate the last two digits of the tax year.
- The fourth character is a sequence number indicating the version of a form for a particular year from a particular print source. (If you produce a second version of the form for the same year, change this digit to a 2.)
- The fifth and sixth characters indicate the print source. Each vendor must be assigned a unique print source code; to obtain the code, contact the Tax Department (see section XV for contact information).
- The seventh character is a 1 or 2 indicating front (1) or back (2) of the form.
- The eighth character is a check digit computed from the first seven digits, following the same calculation as for the barcode check digit (see section XIV on page 5).

XV. Forms approval and deviations from these specifications

If you previously received approval to produce substitute forms, you still must submit samples with updated barcodes and scan lines whenever you revise anything on these forms.

For approval of any substitute **scannable** forms or permission for deviation from these specifications, submit forms or deviation requests to:

ATTN: JOANNE TOUHEY
NYS TAX DEPARTMENT
TSS WITHHOLDING TAX
W A HARRIMAN CAMPUS
ALBANY NY 12227

Telephone: (518) 457-0011
Fax: (518) 485-0449

Send your questions on the withholding tax form review process to TSS_WH_Forms_Review@tax.state.ny.us.

Samples required

Please submit one blank sample, 5 samples with data fields maximum filled, and 5 samples with typical taxpayer data, for each scannable form being submitted for approval. Samples with data fields that are maximum filled must have data in all fields. An explanation must accompany any samples with fields not filled. Please allow 15 workdays from the time you submit your forms for our review.

XVI. Computation of the UI employer registration number check digit

We use the check digit to verify the seven-character UI employer registration number, to avoid posting information to the wrong account.

Compute the check digit by adding the digits in the odd number positions and multiplying the sum by two. This product is then added to the sum of the digits in the even number positions. The digit in the units position of this sum is the UI employer registration number check digit.

Example:

<i>UI employer registration number:</i>	4351689	
<i>Sum of odd positions</i>	4+5+6+9 =	24
<i>Multiply by two</i>		<u>48</u>
<i>Sum of even positions</i>	3+1+8 =	<u>+12</u>
		60
<i>UI employer registration number check digit</i>	=	0

XVII. Computation of the withholding identification number check digit

We use the check digit to verify the 11-character withholding identification number and branch code/suffix, to avoid posting information to the wrong account. The method of check digit computation described below is 100% effective in preventing transcription and transposition errors, and at least 97% effective in preventing random errors.

Compute the check digit using the 9-character ID (including NY and TF numbers) and 2-character branch code/suffix. Equate alpha characters to numeric values. (See the *Alpha character/numeric value chart* on page 8.) For check digit computation purposes, **a 9-character ID should be zero filled in character positions 10 and 11.**

Multiply each of the 11 character positions by an assigned weight of 1 through 11. Add the products of each multiplication and divide the result by nine. Subtract the remainder from 9; the difference is the check digit. Blank spaces equate to zero (0).

Example 1: *ID number without branch code/suffix* 25576843200

<u>2</u>	<u>5</u>	<u>5</u>	<u>7</u>	<u>6</u>	<u>8</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>0</u>	<u>0</u>		Account number weight
<u>×1</u>	<u>×2</u>	<u>×3</u>	<u>×4</u>	<u>×5</u>	<u>×6</u>	<u>×7</u>	<u>×8</u>	<u>×9</u>	<u>×10</u>	<u>×11</u>		
2 +	10 +	15 +	28 +	30 +	48 +	28 +	24 +	18 +	0 +	0 +	=	203

$\frac{22}{9) 203}$	$\frac{9}{-5} =$	Remainder
$\frac{18}{23}$	$\frac{4}{4} =$	Check digit
$\frac{18}{5}$		Remainder

Example 2: *ID number with branch code/suffix* 16043176414

<u>1</u>	<u>6</u>	<u>0</u>	<u>4</u>	<u>3</u>	<u>1</u>	<u>7</u>	<u>6</u>	<u>4</u>	<u>1</u>	<u>4</u>		Account number weight
<u>×1</u>	<u>×2</u>	<u>×3</u>	<u>×4</u>	<u>×5</u>	<u>×6</u>	<u>×7</u>	<u>×8</u>	<u>×9</u>	<u>×10</u>	<u>×11</u>		
1 +	12 +	0 +	16 +	15 +	6 +	49 +	48 +	36 +	10 +	44 +	=	237

$\frac{26}{9) 237}$	$\frac{9}{-3} =$	Remainder
$\frac{18}{57}$	$\frac{6}{6} =$	Check digit
$\frac{54}{3}$		Remainder

Example 3: ID number with alpha prefix TF0479614

29	15	0	4	7	9	6	1	4	0	0	Account number weight											
<u>×1</u>	<u>×2</u>	<u>×3</u>	<u>×4</u>	<u>×5</u>	<u>×6</u>	<u>×7</u>	<u>×8</u>	<u>×9</u>	<u>×10</u>	<u>×11</u>												
29	+	30	+	0	+	16	+	35	+	54	+	42	+	8	+	36	+	0	+	0	=	250

$$\begin{array}{r}
 27 \\
 9 \overline{) 250} \\
 \underline{18} \\
 70 \\
 \underline{63} \\
 7 \text{ Remainder}
 \end{array}$$

$$\begin{array}{r}
 9 \\
 -7 \text{ Remainder} \\
 \hline
 2 = \text{Check digit}
 \end{array}$$

Alpha character/numeric value chart

A = 10	H = 17	O = 24	V = 31
B = 11	I = 18	P = 25	W = 32
C = 12	J = 19	Q = 26	X = 33
D = 13	K = 20	R = 27	Y = 34
E = 14	L = 21	S = 28	Z = 35
F = 15	M = 22	T = 29	Blank space = 0
G = 16	N = 23	U = 30	