

North Carolina Division of Employment Security

Specification and Record Layout for Wage Reporting, Adjustments and Payments



Employer EFW2 Interface File Definition

North Carolina State Unemployment Insurance Tax System

des.nc.gov/ncsuits

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1. Employer EFW2 Interface File Definition

1.1. General Information

This incoming file is submitted to the system via the employer wage file upload process. The file is a fixed length file; there should be five hundred twelve (512) characters in each row. Report the actual wages paid for amended wage records. Do not report the difference between the amended and original wages.

The system will only process RA, RE, RW, RT, and RF record types and will ignore the remaining record types in the SSA Standard file format.

The file contains the following fixed length records:

Record type RA: Submitter Record

- There should be one (1) submitted record per file
- This record will contain information about the entity submitting the file
- This could be employer or agent information
- The record RA must be the first row in the file

Record Type RE: Employer Information

- There should be one (1) total record per file
- This record contains the totals for all type 'RW' records in the file

Record Type RW: Employee State Wage Record

- There should be one (1) employee record for each employee for whom wages are being reported (i.e.: You may not include two records that have duplicate SSNs)
- This record contains individual employee wage information
- There may be a single or multiple employee records in the file but only one (1) employee record for each unique SSN

Record Type RT: Wage Totals

- There should be one (1) total wage record per file
- This record contains wage totals and number of employees

Record Type RF: Final Record

- There should be one (1) final record per file
- This record indicates the end of the file and must be the last row in each file

1.1.1. Rules for Alpha/Numeric Fields

- Left justify and fill with blanks
- Where the "field" shows "Blank", all positions must be blank (spaces), not zeros (0)

1.1.2. Rules for Currency Fields

- Must contain only numbers
- No punctuation
- No signed amounts (positive or negative)
- Right justify and pad with zeros (0)
- Include both dollars and cents with no decimal point (example: \$59.60 = 00000005960)
- Any money field that has no amount to be reported must be filled with zeros (0), not blanks or spaces

1.2. Employer EFW2 Record Layouts

1.2.1. RA Record: Submitter Record

The RA record identifies the organization submitting the file. There is only one (1) RA record, and it must be the first record in each file.

Below is a description for each field in the record:

Location	Field Name	Length	Field Specifications	Required
1 - 2	Record Identifier	2	RA	Yes
3 - 11	Submitter FEIN	9	The submitter's FEIN. Numbers only, do not include the hyphen. Note: may not be the FEIN of the employer for whom wages are being reported.	Yes
12-37	Filler	26	Fill with spaces	Fill with spaces
38-94	Business Name	57	The company name. Left justify and fill with spaces. Truncate if the name is more than 57 spaces	Yes
95-138	Mailing Address	44	The company's mailing address line 1 (Street or Post Office Box). Left justify and fill with spaces.	No, fill with spaces if there is no address line 1
139-160	City	22	The company's mailing address city. Left justify and fill with spaces. Truncate if the name is more than 22 spaces	No, fill with spaces if there is no city
161-162	State	2	The company's mailing address State or commonwealth/ territory. Use postal abbreviations.	No, fill with spaces if there is no State
163-167	ZIP	5	The company's mailing address ZIP code.	No, fill with spaces if there is no ZIP

Location	Field Name	Length	Field Specifications	Required
168-171	ZIP Ext	4	The company's four-digit extension of the mailing address ZIP code. Do not include the hyphen.	No, fill with spaces if there is no ZIP
172-216	Filler	45	Fill with spaces	Fill with spaces
217-273	Submitter Name	57	The name of the person to receive error notification if this file cannot be processed. Left justify and fill with spaces. Truncate if the name is more than 57 characters	Yes
274-317	Physical Address	44	The submitter's physical address (Street or Post Office Box). Left justify and fill with spaces.	No, fill with spaces if there is no address line 1
318-339	City	22	The submitter's physical address city. Left justify and fill with spaces.	No, fill with spaces if there is no city
340-341	State	2	The submitter's physical address State or commonwealth/territory Use postal abbreviations.	No, fill with spaces if there is no State
342-346	ZIP	5	The submitter's physical address ZIP code.	No, fill with spaces if there is no ZIP
347-350	ZIP Ext	4	The submitter's physical address four digit extension of the ZIP code. Do not include hyphen. If not applicable, fill with spaces.	No, fill with spaces if there is no ZIP extension
351-395	Filler	45	Fill with spaces	Fill with spaces
396-422	Submitter Contact Name	27	The name of the person to be contacted by the agency concerning processing problems. Left justify and fill with spaces. Truncate if the name is more than 27 spaces	Yes
423-437	Submitter Contact Phone	15	The contact's telephone number with numeric values only (including area code). Do not use any special characters. Example: 1232345678 Left justify and fill with spaces.	No, fill with spaces if there is no phone number
438-442	Submitter Contact Phone Ext	5	The contact's telephone extension. Left justify and fill with spaces.	No, fill with spaces if there is no extension
443-445	Filler	3	Fill with spaces	Fill with spaces
446-485	Submitter Contact Email	40	The contact's Email address in standard format.	Yes
486-488	Filler	3	Fill with spaces	Fill with spaces

Location	Field Name	Length	Field Specifications	Required
489-498	Submitter Contact Fax	10	If applicable, Include the contact's FAX number (including area code). Otherwise, fill with spaces. For U.S. and U.S. territories only.	No, fill with spaces if there is no FAX number
499-512	Filler	14	Fill with spaces	Fill with spaces

1.2.2.RE Record: Employer Record

The RE record will contain totals reported. There will be one (1) RE record for each employer EFW2 wage file and reporting period. The records will contain the calculated gross (total), taxable, and non-taxable (excess) wages for the reporting period.

Below is a description for each field in the record:

Location	Field Name	Length	Field Specifications	Required
1 - 2	Record Identifier	2	RE	Yes
3-6	Report Year	4	Year for which the report is being filed.	
7	Filler	1	Fill with spaces	Fill with spaces
8-17	Employer ID	10	The employer's ID	Yes
18-39	Filler	22	Fill with spaces	Fill with spaces
40-96	Employer Name	57	The first 57 characters of the employer's name. Left justify and fill with spaces if the name is less than 50 characters. Truncate if it is more than 57 characters.	Yes
97-140	Mailing Address	44	The mailing address of the business submitting the file. This may be different than the address of the business for which the file is being submitted.	Yes
141-162	City	22	The mailing address city of the business submitting the file. This may be different than the city of the business for which the file is being submitted.	Yes
163-164	State	2	The company's mailing address State or commonwealth/ territory. Use postal abbreviations.	Yes
165-169	ZIP	5	The submitter's physical address ZIP code.	Yes
170-173	ZIP Ext	4	The submitter's physical address four-digit extension of the ZIP code. Do not include hyphen. If not applicable, fill with spaces.	No
174-221	Filler	48	Fill with spaces	Fill with spaces
222-248	Employer Contact Name	27	The name of the person to be contacted by the agency concerning processing problems. Left justify and fill with spaces. Truncate if the name is more than 27 spaces	Yes
249-263	Employer Contact Phone	15	Employer telephone number with numeric values only (including area code). Do	No, fill with spaces if there is no phone

Location	Field Name	Length	Field Specifications	Required
			not use any special characters. Example: 1232345678 Left justify and fill with spaces.	number
264-268	Employer Contact Phone Ext	5	Employer telephone extension. Left justify and fill with spaces.	No, fill with spaces if there is no extension
269-278	Filler	10	Fill with spaces	Fill with spaces
279-318	Employer Contact Email	40	Employer Email address in standard format.	Yes
319	No Wage Indicator	1	If no wages were paid in the quarter insert a 0 in this field, if wages were paid insert a 1. There should not be any employee records in the file if the no wage indicator = 0. There must be at least one employee record included if the no wage indicator =1.	Yes
320-321	Report Quarter	2	The last month of the calendar quarter to which the report applies. "03" = First quarter, "06" = Second quarter, "09" = Third quarter, and "12" = Fourth quarter	Yes
322-512	Filler	191	Fill with spaces	Fill with spaces

1.2.3.RW Record: Wage Record

The RW records include the individual wage records for an SSN. Include one (1) row for each unique SSN.

Below is a description for each field in the record:

Location	Field Name	Length	Field Specifications	Required
1 - 2	Record Identifier	2	RW	Yes
3 - 11	SSN	9	The employee's SSN as shown on the original/replacement SSN card issued by SSA without hyphens. If no Refer to "Dummy SSN" section in "Appendices" to learn about how to report wages for unknown SSN	Yes
12-26	First Name	15	The employee's first name as shown on the SSN card. Left justify and fill with spaces. Truncate if the name is greater than 15 characters	Yes
27-41	Middle Initial	15	Left Justify and If applicable, include the employee's middle initial	No
42-61	Last Name	20	The employee's last name as shown on the SSN card. Truncate if the name is greater than 20 characters	Yes
62-65	Suffix	4	Left justify and include the employee's alphabetic suffix if applicable. For example: SR, JR.	No. fill with spaces if no suffix
66-179	Filler	114	Fill with spaces	Fill with spaces
180-181	Adj Reason Code	2	Numeric - Reason code for adjustment to employee wages. 00 means original filing. Valid adjustment reason codes are 01 through 10.	Yes
182-187	Reporting Period	6	This field will contain the last month of the quarter and the year. For example, the values for 2016 would be: 1st quarter - 032016 2nd quarter - 062016 3rd quarter - 092016 4th quarter - 122016	Yes
188-198	Gross Wage Amt	11	Total Gross wages for employer/reporting period. Do not use comma separator or decimal. The maximum value allows is 999,999,999.99	Yes
199-209	OOS Wage Amt	11	Right justify and fill with zeros. Do not include the decimal. For example \$25.64 should be included as: 00000002564	Yes, if there are no out of state wages fill with zeros (0)
210-211	OOS Wage State Code	2	The OOS Wage state code or commonwealth/territory Use postal abbreviations.	Yes, if OOS Wage Amt is provided
212-257	Filler	46	Fill with spaces	Fill with spaces

Location	Field Name	Length	Field Specifications	Required
258-267	Employer ID	10	Employer ID	Yes
268-337	Filler	70	Fill with spaces	Fill with spaces
338	Employee On12 Month1	1	Will contain whether the employee was included on the payroll that included the 12th of the month for the first month of the quarter 0=No 1=Yes	Yes
339	Employee On12 Month2	1	Will contain whether the employee was included on the payroll that included the 12th of the month for the second month of the quarter 0=No 1=Yes	Yes
340	Employee On12 Month3	1	Will contain whether the employee was included on the payroll that included the 12th of the month for the third month of the quarter 0=No 1=Yes	Yes
341	Employee Officer Code	1	Put a 1 if the employee is an officer of the business, otherwise use a zero (0)	No
342-344	Hours Worked	3	Include hours worked during the quarter for the employee. Total wages and hours worked cannot both equal zero for an original filing.	No, fill with spaces if hours worked are not included
345-375	Adj Code 'Other' Explanation	31	Include the reason for adjustment if adjustment code = 10. If another adjustment code was used, fill with spaces.	No. Only if adj. reason = 10 otherwise fill with spaces
376-385	Location ID	10	ID of the site where an employee specifically works or the unit to which the employee is attributed	No
386-391	SOC Code	6	Occupation code for employee	No
392	Seasonal Indicator	1	Indicates seasonal employment for employee	No
393-512	Filler	120	Fill with spaces	Fill with spaces

1.2.4.RT Record: Total Record

The RT record includes the totals for the file. This must be the last record in the file.

Below is a description for each field in the record:

Location	Field Name	Length	Field Specifications	Required
1 - 2	Record Identifier	2	RT	Yes
3 - 7	Filler	5	Fill with spaces	Fill with spaces
8-17	Employer ID	10	Employer ID	Yes
18-23	Reporting Period	6	Last month and year of reporting period. Ex: First quarter 2014 would be stored as 032014	Yes
24-33	Filler	10	Fill with spaces	Fill with spaces
34-53	Total Gross Wages	20	Gross wages reported by the employer for reporting period. Right justify and pad with zeros. Include the cents but no decimal. For example \$25.64 should be included as: 00000000000000002564 The maximum value allowed is 999,999,999.99	Yes
54-73	Total Taxable Wages	20	Taxable wages calculated from the records processed. Right justify and pad with zeros. Include the cents but no decimal. For example \$25.64 should be included as: 00000000000000002564 The maximum value allowed is 999,999,999.99	Yes
74-93	Total Excess Wages	20	Non-taxable wages calculated from the records processed. Right justify and pad with zeros. Include the cents but no decimal. For example \$25.64 should be included as:00000000000000002564 The maximum value allowed is 999,999,999.99	Yes. Excess wages must equal total wages minus taxable wages. If the excess wages paid value is unknown, put zeros. The system will calculate the excess wages based on the wage submission. Do not leave blank, put zeros if unknown.
94-103	Filler	10	Fill with spaces	Fill with spaces

Location	Field Name	Length	Field Specifications	Required
104-108	No. of Employees On12 Month1	5	The number of employees who were included in the payroll for the payroll period on the 12th of month for the first month of the quarter. Right justify and pad with zeros.	Yes
109-113	No. of Employees On12 Month2	5	The number of employees who were included in the payroll for the payroll period on the 12th of month for the second month of the quarter. Right justify and pad with zeros.	Yes
114-118	No. of Employees On12 Month2	5	The number of employees who were included in the payroll for the payroll period on the 12th of month for the third month of the quarter. Right justify and pad with zeros.	Yes
119-512	Filler	394	Fill with spaces	Fill with spaces

1.2.5.RF Record: Summary Record

Location	Field Name	Length	Field Specifications	Required
1 - 2	Record Identifier	2	RF	Yes
3 - 7	Filler	5	Fill with spaces	Fill with spaces
8 - 16	Total No. of Employees in File	9	The total number of RF records reported on the entire file. Right justify and fill with zeros.	Yes
17 - 36	Total Wages Reported in File	20	The sum of gross wages reported in the file. Right justify and fill with zeros. For example \$25.64 should be included as: 00000000000000002564 The maximum value allowed is 999.999.999.99	Yes
37 - 512	Filler	476	Fill with spaces	Fill with spaces

1.3. Amendment Submission

To amend wages for a SSN, employers should enter the proper adjustment code for each amended SSN record at position 180-181. A new employee can be added by simply adding a new record with the proper wages. To modify wages for an employee, employers must enter the same SSN and the new wages with proper adjustment code. To delete an employee from the submission, employers must enter the SSN with zero (0) wages and proper adjustment reason code.

All wage amendment submissions will process as a batch, regardless of the number of records in the original submission.

2. Appendices

2.1. Worker Relationship

NCDES requires information about the relationship between the employee and the employer. This information will be used to help staff make determinations regarding unemployment claims.

The types and values that should be included in the file are described below:

Value	Title	Description
0	Worker/Employee	Use code zero (0) if there is no owner or officer relationship between the worker and the employer. Most workers will fall into this category
1	Owner or Officer	Use code one (1) if the worker is also an owner or officer of the business.

2.2. Adjustment Reason Codes

Code used for amendments. .

The code descriptions are the following:

Code	Adjustment Reason
1	Reported individual wages in error
2	Reported name error
3	Social security number error
4	Wages reported to North Carolina in error
5	Wages reported to another state in error
6	Wages of proprietor reported in error
7	Wages of minor child/spouse/parents of proprietor reported in error
8	Wages of partner reported in error
9	Wages of minor child/spouse/parents of partner reported in error
10	Miscellaneous error (note required)
11	Supplemental Wages

2.3. Email Standard Format

- Must contain only one (1) @ symbol
- Must not contain consecutive periods to the left or right of the @ symbol
- Must not contain empty spaces to the left or right of the @ symbol
- Must not contain a period in the first or last position
- Must not contain a period immediately to the left or right of the @ symbol
- Must not contain an @ symbol in the first or last position
- Must not contain characters other than alphanumeric, hyphens, or periods to the right of the @ symbol

- Must not contain hyphens immediately to the right of the @ symbol or before or after a period
- Must contain either alphanumeric characters or the following keyboard characters, to the left of the @ symbol: (~!#\$%^&*_{}|?'\`= / `)

2.4. SSN Standard Format

Social Security Numbers are validated based on the standard Social Security Administration rules. These are listed below.

- Must contain 9 numeric digits
- A Social Security number CANNOT:
 - Contain all zeroes in any specific group (i.e., 000-##-####, ###-00-####, or ###-##-0000)
 - Begin with '666'.
 - Begin with any value from '900-999'
 - Be '078-05-1120'
 - Be '219-09-9999'
 - Be 000000000, 111111111, 222222222, 333333333, 444444444, 555555555, 666666666, 777777777, 888888888, 123456789, 987654321

2.5. Dummy SSN

If the Social Security Number is not available or unknown for an employee, you can report their wages using dummy SSN. An SSN starting with 9 is considered a dummy SSN in NCSUITS. You can report more than one dummy SSN for a quarter, but each SSN must be unique.

Following are some examples of dummy SSNs

- 900000001
- 900000002
- 900000003
- 900000004
- 900000005
- 900000006
- ...
- ...
- 999999999



2.6. FIPS Code

Name	FIPS Code	Postal Code
Alabama	1	AL
Alaska	2	AK
American Samoa	60	AS
Arizona	4	AZ
Arkansas	5	AR
California	6	CA
Colorado	8	CO
Commonwealth of the Northern Mariana Islands	69	MP
Connecticut	9	CT
Delaware	10	DE
District of Columbia	11	DC
Florida	12	FL
Georgia	13	GA
Guam	66	GU
Hawaii	15	HI
Idaho	16	ID
Illinois	17	IL

Name	FIPS Code	Postal Code
Indiana	18	IN
Iowa	19	IA
Kansas	20	KS
Kentucky	21	KY
Louisiana	22	LA
Maine	23	ME
Maryland	24	MD
Massachusetts	25	MA
Michigan	26	MI
Minnesota	27	MN
Mississippi	28	MS
Missouri	29	MO
Montana	30	MT
Nebraska	31	NE
Nevada	32	NV
New Hampshire	33	NH
New Jersey	34	NJ
New Mexico	35	NM
New York	36	NY
North Carolina	37	NC
North Dakota	38	ND
Ohio	39	OH
Oklahoma	40	OK
Oregon	41	OR
Pennsylvania	42	PA
Puerto Rico	72	PR
Rhode Island	44	RI
South Carolina	45	SC
South Dakota	46	SD
Tennessee	47	TN
Texas	48	TX
U.S. Virgin Islands	78	VI

Name	FIPS Code	Postal Code
Utah	49	UT
Vermont	50	VT
Virginia	51	VA
Washington	53	WA
West Virginia	54	WV
Wisconsin	55	WI
Wyoming	56	WY

2.7. Sample File Layouts

Employer EFW2 - Original	 Employer_EFW_Original.txt
Employer EFW2 - Amendment	 Employer_EFW_Amendment.txt

2.8. Wage Report File Validations

EFW2 – Wage Report File Validation



EFW2%20-%20Wage
Report%20File